

**Bergbau, Tagebau, Umbau:
The Post-Industrial Landscape Aesthetics of Repurposed Coal Mines in Germany**

by

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Dedication

For MoM and DaD

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ABSTRACT

This dissertation examines the development of what I call “post-industrial landscape aesthetics” in the transformation of German coal mines into sites for walking tours, architectural landmarks, land art installations, public parks, and exhibitions. Between 1989 and 1999, the International Building Exhibition Emscher Park in the Ruhr Valley and the Industrial Garden Realm in Saxony-Anhalt commissioned artists and architects to design new spaces and artworks in these post-industrial landscapes. I argue that the aesthetics of these projects engage visitors and create experiences that complicate conventional understandings of the relationship between nature and industry, and that temper critical contemplation of local mining history with playful recreation in the present and optimism for post-coal futures. I build this argument by analyzing case studies of major projects at former coal mines.

I begin by introducing the concept of *Industrienatur* (“Industrial nature”) that Karl Ganser and Jörg Dettmar developed at the beginning of the IBA Emscher Park. In conjunction with art, this idea prompts visitors to explore repurposed sites of industry, and to discover the beauty and ecological value of the post-industrial landscape through firsthand experience. I illustrate this in the case studies of art installations by Detlef Kelbassa and Corinna Kuhn at Landscape Park Duisburg North, and by Ulrich Rückriem at Zeche Zollverein in Essen. I thus establish *Industrienatur* as a leitmotif for my subsequent analyses of post-industrial landscape aesthetics.

In the second chapter, I explore theatrical, guided walking tours and land art gardens that

Bertram Weisshaar created in the Golpa North strip mine (now Lake Gremmin) near Dessau. Weisshaar incorporated theories of the sublime, eighteenth-century garden art, and Robert Smithson's land art into playful, physically and intellectually engaging activities. Through these minimal artistic interventions, visitors encountered a landscape full of spontaneous flora and fauna, and experienced a brief moment in the site's history between the cessation of mining and the flooding of the resulting pit.

In the third chapter, I examine how architecture by Wolfgang Christ and land art by Herman Prigann each engage with the two coal mining landscapes that I study in the dissertation, namely the western Ruhr, which features mountainous piles of waste from anthracite mining, and Saxony-Anhalt to the east, where flooded lignite strip mines resemble an artificial lake district. By analyzing Christ's and Prigann's projects in dialogue with theories of nature aesthetics by Gernot and Hartmut Böhme, I delve into the phenomenology of post-industrial landscape aesthetics. Furthermore, the connections that I identify among these creators, artworks, and theories help to bridge the geographic and disciplinary boundaries that separate my case studies throughout the dissertation.

In the final chapter, I analyze the 1997 *Bundesgartenschau* ("Federal Garden Show") at the Zeche Nordstern coal mine in Gelsenkirchen, as well as the resulting *Nordsternpark* ("North Star Park"), through the lens of Charles Jencks' post-modern architectural theory. The garden show foregrounded the renovation of the mine into a public park, and highlighted this transformation with original works by Heino, Dani Karavan, Hans-Ulrich Humpert; since then, Markus Lüpertz has contributed an additional sculpture to the site's landmark status. I argue that the various tensions at work in these projects illustrate what Jencks calls "double-coding." Here, visitors can experience an intensive intervention into the post-industrial landscape that holds

opposites such as new and old, popular and avant-garde, and natural and industrial in dynamic tension.

CHAPTER I

The Post-Industrial Landscape Aesthetics of *Industrienatur*

A young grape vine stretches its coils along a fence, completely indifferent to the sign that warns human visitors to stay away from the industrial monument beyond. It doesn't seem to mind that it has taken root in soil that still bears chemical residues from decades of coking, a high-temperature process that separates volatile impurities from raw coal. And it certainly doesn't care that its very existence, if left unchecked, could threaten the structural integrity and carefully managed appearance of one of Germany's UNESCO World Heritage Sites. The grape vine is exclusively concerned with growing and multiplying, and it will pursue these goals until some human armed with a weed trimmer comes to clean up the fence. Yet if this one organism dies in the name of industrial heritage preservation, thousands of other plants and animals will continue to thrive because of that practice. By protecting this decommissioned industrial site from demolition, humans have not only saved a part of their material culture, but have also conserved a landscape in which flora and fauna can take refuge from urban sprawl amidst the remains of structures and machines that once threatened the environment.



Figure 1.1: The coking plant at UNESCO World Heritage Site Zeche Zollverein in Essen, Germany. Photo: Author, 2018.

From 1989 to 1999, two large-scale German post-industrial revitalization programs produced landscapes in which green hills and forests, and clear lakes replaced the remains of mining. The more prominent of these programs was the *Internationale Bauausstellung Emscher-Park* (IBA Emscher Park), which was responsible for 120 individual projects throughout the Ruhr region. The other was the newly-reopened Bauhaus Dessau's *Industrielles Gartentreich* (IGR), which included 16 projects in a triangular area around Dessau, Bitterfeld, and Wittenberg. Although these programs arose independently of each other, they quickly established a mutual exchange of expertise and personnel. Through their collaboration, a third program arose as an extension of the IGR, namely the *EXPO 2000 Korrespondenzstandort Sachsen-Anhalt* (EXPO 2000). At many of the IBA Emscher Park, IGR, and EXPO 2000 sites, park design, landscape art and architecture, and interpretive signage reveal a unique relationship between industrial and natural aspects. This relationship entails not only apparent contradictions between the two categories, but also tangible proof that flora and fauna both thrive on the grounds of decommissioned mines, mills, refineries, and factories.

In this dissertation, I argue that these programs developed what I will call “post-industrial landscape aesthetics.”¹ The planners, architects, and artists whose interventions I study all participated in an overarching endeavor to create opportunities for visitors to discover these sites’ inherent tensions between nature and industry, as well as their complex temporal layering

¹ My choice overlaps with Jonathan Maskit’s concept of “postindustrial environmental aesthetics” in several ways, but our work also differs in important ways. Maskit’s term differs from mine only by a hyphen and the adjective “environmental,” and two of his examples overlap with case studies that I examine in this dissertation. Yet his engagement with the post-industrial is part of a larger endeavor to develop a theory of environmental aesthetics that focuses on the effects of art unto itself. In contrast to Maskit, I will pay closer attention to the visitor’s experience of the post-industrial landscape, and I will analyze how art in that landscape affects that experience. One might summarize the difference as follows: whereas Maskit writes that certain artworks function “[b]y bringing those sites to us,” I will focus on parks and artworks that instead bring us to those sites. See: Maskit, Jonathan “Line of Wreckage’: Towards a Postindustrial Environmental Aesthetics” *Ethics, Place & Environment*, vol. 10, no. 3, London: Taylor & Francis, October 2007, pp. 329.

of past, present, and future. This entailed a wide array of strategies, from artistically accentuating the beauty or sublimity of spontaneous vegetation and architectural remains at decommissioned mines, through completely renovating such sites into public parks, as well as posting informational and interpretive signage, conducting tours, and hosting events. By examining my case studies through the lens of post-industrial landscape aesthetics, I aim to identify and analyze the common threads that unite this selection of landscape parks, land art, landmark architecture, garden shows, and guided tours.

For the purpose of this dissertation, I will employ the adjective “post-industrial” to indicate that a site, project, artwork, landscape, or even concept involves physical space and material formerly involved in industrial production. This particular interpretation of “post-industrial” differs from the original version that Ananda Coomaraswamy and Arthur Penty coined in 1914, as well as from economic and technological theories of the “post-industrial” that arose during the mid- to late-twentieth century.² Instead, I adapt the use of “postindustrial” that scholars such as Kerstin Barndt, Jonathan Maskit, and Caitlyn DeSilvey have established.³ My inclusion of a hyphen between “post” and “industrial” reflects Charles Jencks’ rationale for maintaining similar hyphenation in the terms “post-modern” and “post-modernism,” namely that

² Coomaraswami and Penty used the term to describe an ideology that was related to socialism, but that opposed to any form of industrial production. In 1959, Daniel Bell applied it to the shift in economic emphasis from manufacturing to service. Into the 1960s other theorists turned their focus to the increasing importance of science and technology over heavy industry. And in the 1980s, the interpretations of “post-industrial” shifted to describe an idea that the mechanization of labor would allow the working class to pursue leisure and creative activities. See: Rose, Margaret. *The Post-Modern and the Post-Industrial. A Critical Analysis*. Cambridge: Cambridge University Press, 1991, pp. 21-23, 169-171.

³ Barndt uses the adjective “postindustrial” to describe landscapes, landscape parks, and recreational gardens (among other spaces) such as the Landscape Park Duisburg North, and the lake district that the IBA Fürst-Pückler Land created in Lusatia’s former strip mining region. Maskit, as mentioned in the previous footnote, applies “postindustrial” to the environmental aesthetics that he develops through analyses of Robert Smithson, Richard Serra, Peter Latz (the designer of Landscape Park Duisburg North), and Herman Prigann (whose works I will also analyze in a subsequent chapter). DeSilvey also uses the term to describe the Landscape Park Duisburg North, and includes vegetation as part of the “postindustrial landscape.” See: Barndt, Kerstin. ““Memory Traces of an Abandoned Set of Futures”: Industrial Ruins in the Postindustrial Landscapes of Germany.” *Ruins of Modernity*, Hell, Julia and Andreas Schönle, editors, Durham, N.C.: Duke University Press, 2010, pp. 270-293; Maskit, pp. 323-337; and DeSilvey, Caitlin. “A Positive Passivity. Entropic Gardens.” *Curated Decay: Heritage Beyond Saving*, Minneapolis: University of Minnesota Press, 2017, pp. 97-126.

doing so accentuates the act of combining two terms (“bisociating” them), allows each “side of the equation” to stand on its own, and highlights their “hidden commonal[ities].”⁴ I will examine the relationship between my concept of post-industrial landscape aesthetics and Jenck’s theories of post-modern architecture in a subsequent chapter.⁵ In this introduction I will study a similar dynamic at work in the case of the post-industrial landscape neologism *Industrienatur*. Because German compound nouns do not use the same hyphenation conventions, Jencks’ considerations do not translate smoothly into the example of *Industrienatur*. But the dynamics of bisociation by which each element of the term (“industry” and “nature”) stands out, while the “hidden” commonalities between the two also come to the fore, nevertheless apply to the seemingly paradoxical concept of *Industrienatur*.

I understand “landscape” to be the physical space that has been transformed and rendered accessible to the visitor. This includes geographic terrain, vegetation (spontaneous or cultivated), architecture (whether ruined, renovated, or entirely novel), and land art.⁶ The examples that I will focus on in the following chapters are all former coal mines, because the industrial transformation of landscape is most pronounced at mining sites. Because the act of extracting minerals from the earth directly impacts terrain in multiple ways, this form of industry has led to

⁴ Jencks also uses this distinction to acknowledge the existence of multiple “post-modernisms,” and I extend this logic to the “post-industrial,” which allows my interpretation to exist alongside other versions of the term. He writes: “This is its taste for the hybrid moment, the instant of creation, when two different systems are suddenly conjoined so that one can appreciate both sides of the equation and their union. As the usual conjunction of post-modernism, I have called this creative binding ‘double coding’ and it is similar to what the writer Arthur Koestler termed in a book of this name, the act of creation. The basic act he termed ‘bisociation’, that is the bringing together of two previously independent matrices, organisms or systems so that their hidden commonalty is discovered.” Jencks, Charles. *Critical Modernism: Where is Post-Modernism Going?* Chichester: Wiley-Academy, 2007, pp. 10.

⁵ Because my understanding of post-industrial comes from scholars such as Barndt, Maskit, and DeSilvey, and because I refer specifically to Jencks’ concept of post-modern, Margaret Rose’s historical analysis of the relationship between these two terms differs significantly from what I will argue in the fourth chapter of this dissertation.

⁶ Because both human intervention and ecological succession (the process by which plants and animals take over sites abandoned by humans) form the landscapes that I study, the contrasts and slippages between the categories of “artificial” and “natural” will be important for my discussions. However, my aim is not to develop a new understanding of post-industrial nature, but rather to analyze how other articulations of that nature contribute to post-industrial landscape aesthetics.

the most salient examples of post-industrial landscape aesthetics. By contrast, coking, metallurgy, refining, and all subsequent forms of processing leave comparatively small impacts on landscape. To be clear, all branches of industry involve extensive architectural and infrastructural interventions, and leave behind contamination that affects the flora and fauna of *Industrienatur*. But only mining, and in the German context specifically coal mining, leaves mountains of waste stone and vast lakes of flooded strip mines in its wake.

The German terms *Bergbaufolgelandschaft* (“post-mining landscape”) and *Landschaftsbauwerk* (“landscape construction,” a type of mining waste pile that is engineered to resemble “natural” terrain) relate closely to the post-industrial landscapes that I study here. Both terms arise from mining or mining remediation technologies, and are widespread in German-language promotional materials and scholarship alike.⁷ Yet the aspects of landscape transformation, aesthetics, and pedagogy that I aim to analyze are absent from these terms, which focus primarily on the fact that the given landscape was formerly a mine. The effects of weathering and ecological succession combine with those of artistic and architectural interventions to make these landscapes significant for more than just their value as industrial heritage sites. They become open-ended public spaces in which visitors can have a wide variety of experiences, from simple recreation, to contemplation of the site’s aesthetic value, its flora and fauna, and its past, present, and future.

By “aesthetics,” I mean physically perceptible aspects that can evoke a range of effects in the visitor, from intellectual recognition of historical contexts or environmental facts, to emotional responses and connections based on personal memories, to physical engagement with the material of the site itself (whether through sport, other recreation, or even illicit activities).

⁷ See, for example, the *Jahrbuch Bergbaufolgelandschaft* periodical that the Bauhaus Dessau published throughout the second half of the 1990s, as well as: Müller-Krug, Christian H. *Das Bauhaus und die Gestaltung Mitteldeutscher Bergbaufolgelandschaften: Ein Beitrag zur Kunst und Kulturlandschaftsforschung*. Stuttgart: Steiner, 2002.

This understanding of aesthetics refers to the phenomenological concept of “aisthesis,” that is, of embodied perception. This emphasis differs from Kantian ideas of rational aesthetic judgment, although concepts of beauty and sublimity still play a significant role in post-industrial landscape design, as I shall discuss below. Because nature plays such a significant role in the projects I study, my interpretation of the term also diverges from that which considers art criticism to be the exclusive domain of aesthetics. I base these considerations on the works Gernot and Hartmut Böhme, as well as from those of Herman Prigann and Heike Strelow, each of whom developed their own theories of ecological nature aesthetics during the period covered in this dissertation.⁸

In turn, I employ the term aesthetics as a tool with which to understand how artistic and architectural interventions affect what the visitor feels in the post-industrial landscape, both in terms of sensory perception and emotional response. This encompasses not only the experiences of immersion in industrial sculpture forests and panoramic elevation atop mines and mining waste piles, but also the spectrum of different tones that such projects evoke, from melancholic reflection on the ruination and overgrowth of industrial remains, through lighthearted recreation and play, to humorous and ironic reinterpretation of local industrial history and ecology. Throughout the case studies in this dissertation, I will often uncover tensions between the intentions or theories of creators, and the effects of their projects, as well as contradictions within the projects themselves. These points of contrast are themselves an important feature of post-industrial landscape aesthetics, for they contribute to the interpretive open-endedness and the simultaneous complexity and accessibility of the sites in question.

⁸ I will analyze the resonance among these theorists and artists in greater detail in the third chapter. See, for example: Böhme, Gernot. *Für eine ökologische Naturästhetik*. Frankfurt am Main: Suhrkamp, 1989. See also: Prigann, Herman, Heike Strelow, and Vera David, editors. *Ökologische Ästhetik: Theorie und Praxis künstlerischer Umweltgestaltung*. Basel: Birkhäuser, 2004.

The Origins of *Industrienatur*

In this chapter, I will argue that the term *Industrienatur* has the implicit aesthetic goal of creating the conditions in which visitors can discover the beauty and ecological value of the post-industrial landscape through firsthand experience. The IBA Emscher Park and its successors developed this term in order to express the unique relationship between industry and nature in post-industrial landscapes. This neologism, which translates roughly to “industrial nature,” appears on park signs throughout the Ruhr and in publications about the IBA Emscher Park and its successors. Briefly stated, the term refers to the unique variety of plants, animals, and land forms that can be found on the sites of former industry. Even though the term itself does not explicitly include aesthetics, its invention entailed aesthetic arguments that have not yet received significant scholarly attention.

A few English-language scholars have addressed the term *Industrienatur* and provided valuable insights into its implications for our understanding of the relationships between industrial activity, pollution, and ruins on one hand, and spontaneous forms of non-human life on the other.⁹ Although this was not the first occurrence of the term, the version that Karl Ganser and Jörg Dettmar developed in collaboration, while planning what would become Peter Latz’ Landscape Park Duisburg North, has become the most prominent interpretation.¹⁰ In each of the examples below, the discussion of *Industrienatur* occurs within an analysis of Peter Latz’ Landscape Park Duisburg-North, a project of the IBA Emscher Park that turned a Thyssen

⁹ Among English-language the scholars who have engaged with *Industrienatur*, Hillary Angelo comes the closest to identifying the origin of the term. She notes that “*Industrienatur* [...] is a new word that appears to have been invented by IBA (or at least I have found no record of its origin). IBA projects use the word to describe several types of ecosystems now flourishing in former industrial sites.” See: Angelo, Hillary. *How Green Became Good: Urban Greening as Social Improvement in Germany’s Ruhr Valley*. Ann Arbor: ProQuest, 2015, pp. 307. German-language scholars who mention the term tend not to question its genesis or semantics to the same degree. After the foundational writings from the IBA era, in which Ganser, Dettmar, and others explored the potential valences of the term, *Industrienatur* seems to have become accepted, either as self-explanatory or as no longer novel.

¹⁰ See: Sack, Manfred. *Siebzig Kilometer Hoffnung: Die IBA Emscher-Park - Erneuerung eines Industriegebiets*. Stuttgart: Deutsche Verlags-Anstalt, 1999, pp. 65, 68-70, 77.

ironworks into an award-winning, widely-studied public park that opened in 1994.

In 1998 Ganser, the head of the IBA Emscher Park, learned of Dettmar's dissertation on the unique environment and biodiversity of abandoned industrial sites, and recruited the young landscape architect to the IBA Emscher Park.¹¹ Over the course of the decade-long program, Dettmar would become responsible for the ecological development of brownfields, as well as for landscape art and architecture.¹² Sack writes that the intent behind the concatenation of industry and nature was to create a paradox from terms that were, according to common knowledge, mutually exclusive opposites.¹³ The combination of common and generally opposed terms into a short, easily recognizable noun allows *Industrienatur* to operate on several different levels of complexity. From a practical standpoint, *Industrienatur* can be as simple as a matter of branding with which to connect the most ecologically interesting sites of former industry in the Ruhr. Yet the paradox can also pique the curiosity of casual and academic visitors alike.

Sack associates *Reiz* with the term *Industrienatur*.¹⁴ The valences of the German noun *Reiz* are apt for post-industrial landscape aesthetics. Its meanings encompass not only "attraction" and "appeal," but "irritation" and "provocation" as well. The contrast between the "rare, mysteriously-arrived plants" and the "bulky, monstrous industrial museum" that Sack mentions above not only provides an immediate, material manifestation of *Industrienatur*, but also gives it its *Reiz*. As I will discuss below, Ganser and Dettmar attributed contradictory

¹¹ Ibid., pp. 65.

¹² Günter, Roland, Janne Günter, and Peter Liedtke. *Industrie-Wald und Landschafts-Kunst im Ruhrgebiet: Ein Handbuch zu den Zusammenhängen von Wald - Industrie Wald - Landschafts-Kunst*. Essen: Klartext, 2007, pp. 25, 313,

¹³ "Die Aufgabe war, nach herkömmlicher Vorstellung einander ausschließende Gegensätze - Industrie und Landschaft - in ein menschenfreundliches Paradoxon zu verwandeln, in welchem man nicht nur das eine und das andere findet, sondern wo sich das eine ohne das andere schwerlich denken ließe." Sack, pp. 65.

¹⁴ He writes: "Sie besteht aus "Industrienatur" und empfängt ihren Reiz schon von den ihr auf geheimnisvolle Weise zugeflogenen seltenen Pflanzen und aus dem sperrigen, ja monströsen »Industriemuseum«, in dem man nun mit dem Verhüttungsprozeß und der Hochofentechnik bekannt gemacht wird." Ibid., 65. Note that in this passage, Sack associates aesthetic properties with the natural half of *Industrienatur* and pedagogical properties with the industrial half.

aesthetic effects to *Industrienatur* that parallel the ambivalent meanings of *Reiz*.

As part of its *Reiz*, *Industrienatur* entails a kind of beauty that is not immediately apparent. Both Ganser and Dettmar understood *Industrienatur* to have this kind of ambivalent appeal. Ganser often used the phrase “Liebe auf den zweiten Blick” (“Love at second sight”) in the context of IBA Emscher Park sites, which suggests that post-industrial landscapes are not immediately pleasant or beautiful.¹⁵ Dettmar argues that the positive aspects of the post-industrial landscape take a while to perceive, due to a series of negative associations with the aesthetic effects of ecological succession:

Meiner Erfahrung nach bedarf es einige Zeit, bis der Reiz und die spezifische Schönheit der Naturlandschaft auf Industriebrachen wirklich wahrgenommen werden. Dies liegt an der Überlagerung der visuellen Ebene mit einer kulturell bedingten, meist unterbewusst ablaufenden Interpretation und Wertung. Die spontane Sukzession auf Brachen in der Stadt ist zunächst einmal sichtbares Zeichen des Untergangs, der Depression. Unordnung, Chaos, Wildwuchs und Unkraut bedrohen unsere vermeintliche Sicherheit. Städte sind in ihrem Ursprung eben auch Orte der Verteidigung gegen die gefährlichen und unkalkulierbaren Kräfte der Natur gewesen. Natur in der Stadt wurde und wird bis heute meist nur in domestizierter Form in den Gärten und Parks zugelassen. Gerät etwas außer Kontrolle, wuchert etwas, bedroht dies viele Menschen offensichtlich auf der unbewussten Ebene.¹⁶

Note that in this case, Dettmar was describing conventional associations in a metropolitan region undergoing structural change, where the romanticization of industrial ruins was not widespread, nor was the artistic or intellectual fascination with entropy. Thus the negative effects he describes are not tempered by the kinds of melancholy, nostalgia, or ambivalence that scholars such as Edensor, Barndt, Hemmings, and Kagel have since identified in their analyses of these sites. Likewise, the wilderness that Dettmar describes also lacks the romantic connotations that William Cronon has critiqued in the context of North American nature ideals.¹⁷ Instead, the

¹⁵ See, for example: Ganser, Karl. *Liebe auf den zweiten Blick. Internationale Bauausstellung Emscher Park*. Dortmund: Harenberg, 1999. Dettmar writes: “Industrienatur ist vielgestaltiger Ausdruck der Verhältnisse auf industriebedingten Standorten. Der erste Blick reicht jedoch nicht aus, um die Vielfalt und Schönheit wirklich wahrzunehmen.” Dettmar, Jörg, Karl Ganser, and Peter Latz. *Industrienatur: Ökologie und Gartenkunst im Emscher Park*. Stuttgart: Eugen Ulmer, 1999, pp. 134.

¹⁶ Dettmar, Jörg. “Ökologische und Ästhetische Aspekte der Sukzession auf Industriebrachen.” In: Prigann, Strelow, and David, pp. 128-129.

¹⁷ Cronon, William. “The Trouble with Wilderness; or, Getting Back to the Wrong Nature.” *Uncommon Ground*:

visual aspects of overgrown industrial sites come across as depressing and threatening, even sublime, in the sense that they exhibit the “dangerous and incalculable forces of nature.” These factors thereby inhibit the visitor’s perception of the post-industrial landscape as beautiful or *reizend* in the positive sense.

At the most fundamental level, the articulation of *Industrienatur* participates in changing visitors’ aesthetic perception of the post-industrial landscape. The concept therefore has what Maskit calls “aesthetic merit” in his analysis of “postindustrial environmental aesthetics,” by which he means to ask whether it “change[s] how we see.”¹⁸ Here, I would add that all the senses are important to post-industrial landscape aesthetics, as are the visitor’s emotional and intellectual responses to what they perceive. Maskit elaborates on this idea of changing how we (the audience) see, in order to articulate a category within his postindustrial environmental aesthetics that he calls “the interesting.” By “interesting,” he does not mean to indicate that something is fascinating or curious (though it may be), nor even *reizend*, but rather that it is mind-changing, even eye-opening.¹⁹ With this definition of “interesting” in mind, Maskit proceeds to analyze the post-industrial landscape projects of Peter Latz and Partners at Landscape Park Duisburg North, and the land-art installations of Hermann Prigann. I will address the former in this chapter, and the latter in the third chapter, but for now I will focus on

Rethinking the Human Place in Nature, Cronon, William, editor, New York, NY: W.W. Norton & Co., 1996, pp. 69-91.

¹⁸ To be clear, Smithson’s artworks involve a different kind of intervention in the post-industrial landscape than Landscape Park Duisburg North, which Maskit discusses later in the same article. What Maskit writes about Smithson’s work, and how it helps “us see a certain sort of remnant ‘naturalness’ of the site,” also applies to Landscape Park Duisburg North and to *Industrienatur* more generally. “For me the real question is, does Smithson’s intervention in a postindustrial site have aesthetic merit? In other words, does it change how we see? Unlike traditional restoration that seeks to re-create nature to some degree, Smithson’s work helps us see a certain sort of remnant ‘naturalness’ of the site, even if the nature it highlights is more that of physics than biology or ecology.” Maskit, pp. 329.

¹⁹ “I thus propose the category I take to be second only to truth in terms of praise for a concept: the interesting. The interesting is what I have been discussing all along. It is that characteristic of an object of aesthetic appreciation that leads us to think otherwise. For to see otherwise is also to think otherwise. It is to see things as standing in different relations than we had previously seen. It is to see possibilities previously unseen.” Ibid., pp. 332

the importance that Ganser and Dettmar ascribed to changing how people (I refer to “visitors,” where Maskit uses “we”) see and think about these sites.

Dettmar is explicit in his writings that the perception of beauty in *Industrienatur* requires a change in vision and thought. He writes that one must “learn to see,” before the beauty of *Industrienatur* becomes apparent, and that in order to do so, one must abandon held notions of an ideal nature:

Man muß erst sehen lernen, bevor sich die Schönheit der Industrienatur eröffnet. Sie ist bei den meisten Brachen nicht sofort und leicht zugänglich, sondern man muß sich vorarbeiten. Zunächst einmal ist es notwendig, die Bilder von “idealer Natur,” die man im Kopf hat, beiseite zu legen.²⁰

As I discussed above, part of why Dettmar claims that the beauty of *Industrienatur* is not immediately apparent is because of the negative associations people generally have with such sites. But here Dettmar acknowledges an additional hurdle, namely competition from conventional nature ideals. Part of the shift in perceptions is therefore the twofold recognition that there is no original, “pure” nature untouched by human intervention to which to return, and that the post-industrial landscape is, in its own way, also natural.

Scholars have recognized the tensions between the different conceptions of nature that Ganser and Dettmar describe. In their analysis of Landscape Park Duisburg North, a project of the IBA Emscher Park, Hemmings and Kagel write that the park calls established moral evaluations of nature and the built environment into question.²¹ To the extent that visitors may absorb this critique through their experience of the park (via signage, art installations, or general recreation), it can participate in changing how we see. Additionally, Elissa Rosenberg has

²⁰ Dettmar, Ganser, and Latz, pp. 141

²¹ “The idea of a recovering nature often implies that a landscape can deviate from a natural point of origin, and that, through ecological succession, it will eventually return to its pristine state. The modern environmental movement has reinforced this view by valuing the natural, wild realm as morally good, preserving wilderness and protecting endangered species, while casting the built environment in a negative light—or else ignoring it altogether. Duisburg's Landschaftspark defies such facile moral juxtaposition and questions its rationale, since in this landscape the distinction between what is natural and what is not has essentially been effaced.” Hemmings, Sarah, and Martin Kagel. “Memory Gardens: Aesthetic Education and Political Emancipation in the ‘Landschaftspark Duisburg-Nord.’” *German Studies Review*, vol. 33, no. 2, Baltimore: Johns Hopkins University, 2010, pp. 253-254.

contributed a more nuanced understandings of ecology to the environmentalism that underlies Ganser's and Dettmar's fascination with the beauty of *Industrienatur*.²²

Ganser concurs with Dettmar on most points concerning *Industrienatur*, and offers further insight into how artistic interventions assist in the process of shifting perceptions. In explaining that the IBA Emscher Park leveraged federal nature preservation laws to protect inactive industrial sites, Ganser rephrases Dettmar's assertion that we must learn to perceive the industrial landscape as beautiful, and writes that time and art help to achieve this goal:

Es entstehen Naturschutzgebiete auf Industriebrachen nach den Kriterien der "Seltenheit und Schönheit" des Bundesnaturschutzgesetzes. Aber diese Naturschutzgebiete entsprechen nicht unserem gewohnten Bild von "schöner Landschaft," weil diese "neue Natur" in den Bilderrahmen der Industrielandschaft gestellt ist und wir noch nicht gelernt haben, Industrielandschaften als schön zu empfinden.

Das wird sich im Lauf der Jahre ändern. Künstler und Kulturschaffende begleiten uns dabei. Sie malen Bilder, die sich in unseren Köpfen festsetzen und uns helfen, die Natur in der Stadt positiv zu sehen. Sie setzen Zeichen mit Skulpturen, mit zeitweiligen Installationen oder mit Licht, so daß Ruinen der Industrie in einem anderen Licht erscheinen.²³

Here, Ganser's belief in art's ability to change how we perceive these landscapes resonates with Maskit's ideas that what is "interesting" in postindustrial environmental art changes our perceptions (and therefore has "aesthetic merit"). However, both the post-industrial landscape and art are seldom self-explanatory, and further information may be necessary for visitors to fully appreciate *Industrienatur*. For those who come to these sites without prior familiarity with, or investment in, natural processes and artistic expressions, alternative approaches may be necessary to change perceptions.

To Ganser's emphasis on art's role in shaping how visitors value the post-industrial landscape, Dettmar adds scientific information and social use. For Dettmar, learning to see the

²² "This fundamental revision to the understanding of ecosystem dynamics resonates with Latz's fascination with the phenomena of contingency, chance, and adaptation. With a deep understanding of ecological processes, he embraces the dynamic flux of nature, including the forces of disturbance, which he insists must not be erased to fit a preconceived image of what nature should look like. Just as there is no inherent 'balance of nature;' there can be no idealized conception of beauty in the landscape." Rosenberg, Elissa. "Gardens, Landscape, Nature: Duisburg-Nord, Germany." *The Hand and the Soul: Aesthetics and Ethics in Architecture and Art*, Iliescu, Sanda, editor, Charlottesville: University of Virginia Press, 2009, pp. 226.

²³ Ganser, pp. 18.

beauty of *Industrienatur* requires complementary approaches: a serious, scientific way of seeing, like that of a biologist; an aesthetic way of seeing, like that of a painter.²⁴ With the wide range of artistic media that appear throughout the post-industrial landscape projects of the IBA Emscher Park, however, Dettmar's reference to painterly vision should be expanded to encompass photography, sculpture, installation art, and more. By way of example, Barndt analyzes a frieze of photographs by Bernd and Hilla Becher that appears on the former power station of Landscape Park Duisburg North, and writes that its inclusion connects the park to the kind of aesthetic contemplation that the Bechers' photography engages.²⁵

The scientific, biological approach to industrial nature is reflected in the wealth of information that the signage at post-industrial landscape sites provides about the processes of ecological succession, pioneer organisms, and biodiversity of decommissioned industrial sites. The aesthetic component can be stimulated through the strategic use of artistic interventions that engage the visitor's curiosity. To the extent that signage can help the visitor to understand these dimensions of the post-industrial landscape, it contributes to the visitor's aesthetic perception of the site. Angelo notes that, where the ecological succession has reached a point at which the industrial aspects of a site are no longer obvious, interventions such as signs and art restore some of that impression.²⁶

²⁴ "Industrienatur ist vielgestaltiger Ausdruck der Verhältnisse auf industriebedingten Standorten. Der erste Blick reicht jedoch nicht aus, um die Vielfalt und Schönheit wirklich wahrzunehmen. Wir wollen uns deshalb diesen Lebensräumen auf verschiedene Weise nähern. Es beginnt „seriös“ naturwissenschaftlich mit den Augen des Biologen. Doch dies alleine ist nicht genug - man muß die Schönheit und die bizarren Formen auch mit den Augen des Malers sehen." Dettmar, Ganser, and Latz, pp. 134.

²⁵ "Linking the Duisburg site to the Bechers' artistic legacy, the landscape park harks back to the beginnings of preservation efforts of industrial culture in the Ruhr district. Moreover, the frieze establishes the industrial site as an object worthy of aesthetic contemplation. [...] In dialogue with the production site that has become a recreational landscape, the abstract formal shots gain in context and materiality. It is as if the photos reverted back into three-dimensional space, and in this process, not only the former steelworks but also the photos come into a new aesthetic and historical focus." Barndt, pp. 278-279.

²⁶ "Industrial forests, greened coal heaps, and succession gardens all are, in a sense, "wild" and "self-determined" if not returns to some original—but the appearance of real "nature" is dependent on the viewer's ignorance of history and ecology. And so, in cases where *Industrienatur* looks 'natural,' IBA takes special care to 'denature' that



Figure 1.2 (Previous page): *Route der Industrienatur* sign at Zeche Zollverein. Shown here: the generic side of the sign, which is identical at all *Route der Industrienatur* sites. Photo: Author, 2018.

The first encounter that many visitors will have with the concept of *Industrienatur* comes in the form of the signage of the *Route der Industrienatur*. This chain of sites is one of several

representation by explaining how the landscape is a product of the region's unique industrial history or high tech engineering." Angelo, pp. 50.

sub-trails within the larger network of the *Route der Industriekultur* that arose in 1999 through efforts of the IBA Emscher Park to establish ongoing support for its projects. At each of the *Route der Industrienatur*'s eighteen anchor points, a series of signs gives visitors varying levels of information about the site's ecology, industrial history, and importance within the larger context of post-industrial landscape sites.

The text on the generic signs that stand at each *Route der Industrienatur* site describes the processes through which industrial activity has impacted the terrain, and how unique varieties of flora and fauna have come to thrive in the landscape despite (or because of) the resulting environmental conditions. Furthermore, it acknowledges the apparent paradox of *Industrienatur* ("a contradiction in itself"), and suggests aesthetic qualities that visitors may discover, such as "a marvelously colorful abundance of flowers" and "bizarre forms of growth":

"Industrienatur" scheint zunächst ein Widerspruch in sich selbst zu sein. Durch die industrielle Tätigkeit wurden im Ruhrgebiet viele Flächen völlig verändert: Wo zuvor Felder, Wiesen und Äcker waren, entstanden Zechen, Bergehalden, Stahlwerke und Deponien. Schon als die Werke noch in Betrieb waren, siedelten sich hier und dort vereinzelt Pflanzen und Tiere neu an. Nach der Stilllegung eroberte die Natur dann mit rasender Geschwindigkeit die Industriebrachen.

Die besondere Mischung aus Pflanzen und Tieren, die sich an die zum Teil schwierigen Lebensbedingungen heute gut angepasst hat, nennen wir "Industrienatur." Es gibt seltene Arten, eine farbenprächtige Blütenfülle sowie skurrile Wuchsformen zu entdecken. Die besondere Schönheit und Faszination der Brachen liegt in der eigenwilligen und ungewohnten Verbindung von Industriorelikten und wilder Natur. Die Interessantesten dieser Flächen wurden in der Route Industrienatur zusammengefasst und erzählen Geschichten von Naturerlebnissen der besonderen Art.

In this text, it is clear that "nature" means non-human life forms, and that *Industrienatur* consists of life that now thrives on industrially-altered, nutritionally depleted, and contaminated sites.

This attribution of agency to non-human nature in the processes of bioremediation and reclamation of formerly active industrial landscapes almost inverts the logic of the Anthropocene, the geological epoch in which human impacts on the Earth's climate and surface create a distinctive stratigraphic record.²⁷ Yet the effect here is not to eradicate the traces of

²⁷ Mahli, Yadvinder. "The Concept of the Anthropocene." *Annual Review of Environment and Resources*, no. 42, Palo Alto, CA: Annual Reviews, 2017, pp. 77–104.

industry, as can occur with completely abandoned sites and flooded strip mines, but rather to mitigate the impression of its consequences by drawing attention to the resilience of nature. The “beauty and fascination of the brownfield” help to achieve this change in perception.

The statement that the “special beauty and fascination of the brownfields is caused by unusual connection of industrial relics and wild nature” echoes Ganser’s and Dettmar’s ideas about the beauty of *Industrienatur* in contrast to conventional ideals of nature, albeit in condensed form. This public, easily-found definition of *Industrienatur* thus includes abbreviated elements of the aesthetic dimensions of *Industrienatur* stated above, for visitors who may not be familiar with the term’s history.²⁸ At the same time, however, a textual engagement with the concept of *Industrienatur*, whether reading park signs or scholarly accounts, is not a prerequisite for the kind of recognition that Ganser and Dettmar envisioned. Ideally, the visitor’s experience of the site should convince them of this beauty; what they see, hear, smell, feel, and even taste (wild, edible berries and grapes are widespread, should one wish to partake) in the post-industrial landscape should fascinate them and engender appreciation for the site.

Temporalities of *Industrienatur*

Scholars who have worked with *Industrienatur* and Landscape Park Duisburg North have often analyzed temporalities, and provided insights into the complex relationships among past, present, and future that come into play in the dynamic between industry and nature. Roughly stated, the temporal associations that scholar have identified tend to follow the basic pattern “past - industrial / future - natural.”²⁹ Whether carefully preserved or allowed to decay and

²⁸ DeSilvey provides an account of what the process of learning about *Industrienatur* from park signage can entail, and documents her response to the concept, including her curiosity about its multiple, paradoxical levels of meaning. See: DeSilvey, pp. 97-126.

²⁹ Angelo, for example, offers a model of *Industrienatur* as a future-oriented temporality that stands as a counterpart

succumb to overgrowth, the physical remains of industry remind visitors of the site's former uses. Depending on how the site presents these remains (i.e., artistically, museologically, or without further interpretation), and how this presentation interacts with the visitor's individual interests, memories, and held knowledge, the past-oriented temporality of *Industrienatur*'s industrial half can evoke any number of responses. Among scholarly readings of these sites, the most commonly-identified reactions include nostalgic or melancholic affects, and fascination with the aesthetics of industrial forms or their ruins. By contrast, the "natural," future-oriented side of the equation generally involves much more optimistic emotional associations and comparably more conventional forms of beauty. Of course, this rough outline only serves as a foundation from which to approach the complexities that other scholars have contributed to our understanding of these sites.

The post-industrial landscape entails a wide variety of overlapping, contradictory, and constantly-changing temporalities that may appear differently to each individual visitor. The specific choices of the artists and architects who intervene in these sites can highlight specific threads of history or futurity, but the reading ultimately falls to the visitor. Ephemerality complicates the picture further, in the cases of temporary and decaying works such as Bertram Weisshaar's walks and gardens, Herman Prigann's land art, and Dani Karavan's installation, each of which I will discuss in the following chapters. With these considerations in mind, the variety of temporalities that scholars have identified at these sites is hardly surprising.

Sarah Hemmings and Martin Kagel interpret *Industrienatur* as a temporal sequence of reversals between nature and industry that culminates in their reconciliation.³⁰ Their model

to the past-oriented temporality of *Industriekultur*: "Industriekultur frames the past so as to help the Ruhr acquire a cultural history; *Industrienatur* presents the present so as to help the Ruhr acquire a future." Angelo, pp. 309.

³⁰ "The notion of *Industrienatur* attempts to reconcile two realms normally opposed to each other. This is possible by conceiving of nature and industry not as categorically different but rather as periods in historical succession, each

resembles a Hegelian dialectic that progresses from nature (thesis), to industry (antithesis), and *Industrienatur* (synthesis). In the final stage, Hemmings and Kagel write that the aesthetic qualities of “plants and factory” suggest that the two “have witnessed some difficulty together and that both emerged bearing qualities of the other.”³¹ However, the formulaic elegance of this model obscures asymmetries between the agencies of human and non-human natures as much as it elides the pre-industrial history of anthropogenic landscapes. Throughout the case studies that I analyze in this dissertation, the greater the degree to which humans and non-human nature transform the site, the greater the risk becomes that the interventions will obscure the extent to which human industry has exploited the environment and endangered all nearby forms of life. So although Hemmings and Kagel’s thesis-antithesis-synthesis understanding of the relationship between nature and industry in *Industrienatur* may not be entirely apt to describe the complexities of temporality in the post-industrial landscape, it does highlight important dynamic tensions that are in play on multiple levels.³²

In the post-industrial landscape, Barndt identifies a complex temporality in which multiple, non-synchronous historical layers are simultaneously present. According to this interpretation, “the landscape’s natural palimpsest foregrounds the longue duree of geological time,” at the same time as it bears traces of subsequent historical moments through the present.³³

Indeed, without the fossilization of carboniferous-period plant life, Ruhr coal industries would

becoming the foundation for the other. Following this trajectory, the industrial site can become fertile ground for ecological rebirth in a process at the end of which “a landscape in the original sense is no longer discernable.” Hemmings and Kagel, pp. 252.

³¹ “The impression given is that plants and factory have witnessed some difficulty together and that both emerged bearing qualities of the other. Clinging to window ledges or snaking through gravel towards sunlight, the vegetation looks ragged, just as the rusted factory looks worn.” Note that Hemmings and Kagel’s claim that “the vegetation looks ragged” plays into the kind of unconscious negative associations that Dettmar identified above. Ibid., pp. 252.

³² I will delve into this point in much greater detail in the fourth chapter, when I examine the 1997 *Bundesgartenschau Gelsenkirchen* and the resulting Nordsternpark through the lens of Charles Jencks’ theories of post-modern architecture.

³³ “The landscape’s natural palimpsest foregrounds the longue duree of geological time which would exceed any notion of human historical processes and memory formations—be they defined as industrialization, fascism, socialism, or individual and generational history.” Barndt, pp. 273.

not have existed in the first place. To the extent that the present historical layers and natural elements receive different degrees of interpretation from park design, signage, and artistic interventions, the full temporal dimensions of the post-industrial landscape are not immediately legible. Yet if *Industrienatur* changes our perception as Ganser and Dettmar (and likely Maskit) contend, then prolonged or repeated encounters with these sites should make the subtleties and complexities more tangible to visitors.

Given the multiplicity of meanings that are present in the post-industrial landscape, the visitor's actions, responses, and held knowledge are inseparable from the interpretation of the site. Barndt writes that "Our task as decoders of time in landscape, then, is to put the nonsynchronous back into play by questioning the ostensible equilibrium of natural time and by working out the contradictions between different temporal layers, material remnants, and human experiences."³⁴ And even in their dialectical model of *Industrienatur*, Hemmings and Kagel concur that the layered complexity of Landscape Park Duisburg North "is best 'read' through direct experience."³⁵ The ways in which the landscape unfolds over time depends on the visitor's pace, decisions, and attention, as well as on the ways in which park design and art shape the possibilities that are available to the visitor.

In the following case studies—both within this chapter and throughout the dissertation—I will engage as much as possible with firsthand experience of the sites and projects involved. I have documented my movements through these post-industrial landscapes in text and

³⁴ Ibid., pp. 273.

³⁵ "While words and pictures provide some sense of the park's layout, its layered structure is naturally best 'read' through direct experience of the landscape. Conceptually open, the park is designed to be a landscape where different meanings emerge through individual use. [...] Wandering across overgrown rails in directions undefined, climbing the furnaces to contemplate church steeples and operational smokestacks beyond, bringing children or pets for recreation, or even passing through the park on the way to work constitute possible readings. The multitude of encounters and the contingency of the experience render the park a space singularly open to the individual's ingenuity and imagination, as it is now possible to traverse the terrain with the perspective of independent subjectivity." Hemmings and Kagel, pp. 250-251

photographs, in order to convey as much temporally specific, sensory data as possible.³⁶ At the same time, I open my analyses to the wide range of experiences that other visitors may have. This approach is informed by the work of other scholars of post-industrial sites, such as Edensor, Barndt, High and Lewis, and DeSilvey, to name a few.

The Art of *Industrienatur* at Landscape Park Duisburg North

From May 4 through October 5, 2014, Landscape Park Duisburg North featured *Refugien II*, a series of works by Oberhausen-based artists Detlef Kelbassa and Corinna Kuhn.³⁷ The installation took place across the interconnected ore bunkers of the former steel mill, and featured Kelbassa's and Kuhn's "zoobotanical biomorphic phenomena," a collection of over seventy brightly-colored sculptures of fictional plant-animal lifeforms in various shapes and sizes. This menagerie is part of a growing collection entitled *Kelbassas Panoptikum*, which the duo calls a "moderne Wunderkammer" ("modern cabinet of curiosities").³⁸ The reference to panopticons and cabinets of curiosity provides an interpretive handle with which to approach their sculptures. Just as the specimens in these historic collections often crossed boundaries between categories such as plant/animal/mineral, factual/fanciful, education/entertainment, scientific/artistic, and natural/artificial, so too do Kelbassa's and Kuhn's sculptures.

³⁶ In some cases, I will display two or three photographs together, to communicate a spatial, temporal, or aesthetic relationship that goes beyond the descriptive capabilities of language.

³⁷ *Refugien II* was a sequel to *Refugien der Anarchie*, Kelbassa's and Kuhn's 2013 exhibit of photography and found objects at Haus Ripshorst in Oberhausen, one of the eighteen sites along the Route der Industrienatur. They attribute inspiration to Lucius Burckhardt's "Spaziergangswissenschaft" ("Strollology"), which I will discuss in the following chapter. See: Kelbassa, Detlef and Corinna Kuhn. "Refugien der Anarchie 2013 Haus Ripshorst, Oberhausen." *Kelbassa's Panoptikum*, Detlef Kelbassa + Corinna Kuhn, not dated, https://www.kelbassas-panoptikum.de/refugien_der_anarchie2013.html.

³⁸ See: Horstmeier, Anne. "Bunker als Wunderkammer." *Westdeutsche Allgemeine Zeitung. Essen: Funke Medien NRW GmbH*, 30. April 2014. See also: Micke, Andrea. "Ein wundersames Oberhausener Künstlerpaar." *Westdeutsche Allgemeine Zeitung. Essen: Funke Medien NRW GmbH*, 10. July 2014.



Figure 1.3: *Brutstätte* by Detlef Kelbasssa and Corinna Kuhn, at Landscape Park Duisburg North. Photo: Author, 2014.

The museological aspect of *Refugien II* appears in the form of several signs that introduce the most remarkable species, by their common and Latin names, that can be found throughout

the installation. The most prominent of these is the *Wandersprosse*, alias *Stirps vagans muelleri* (“Wandering Sprout”), a subterranean organism that extends its thick, lumpy, yellow-green sprout through the ground’s surface in a two-meter arc. Among their creations, Kelbassa and Kuhn give this species the most thorough treatment, in the forms of additional signage and an entire blog dedicated to its documentation.³⁹ The only other species that the artists provide names for appear as silhouettes on another informational sign, so that visitors must guess what kind of sculpture to look for. These include the *Wundersame*, alias *Faba mirabilis* (“Miracle Seed (or Bean),” a pun on the German adjective for “wonderful”), which features a large, veiny yellow bud emerging from a thick green stalk among spontaneous vegetation; the *Blaublütiger Tentakel*, alias *Flos caeruleus mollis* (“Blue-flowering Tentacle”), a many-armed mass that clings to trees; and the *Dreistieliger Blütenrüssler*, alias *Tychius trifasciculatus* (“Three-Stalked Flowerweevil”), a rainbow-colored oddity with six short appendages and a long proboscis that spouts three large flowers, which can be found hiding in an inaccessible tunnel. An element of adventure accompanies the activity of exploring the bunkers in search of these creations. With only textual descriptions and silhouettes to refer to, visitors can discover the scale, color, texture, and full, three-dimensional form of each sculpture in unexpected places. Finding them prompts feelings of surprise, wonder, amusement, and even achievement.

³⁹ In addition to their home website, Kelbassas-Panoptikum.de, the two run the blog wandersprosse.wordpress.com.



Figure 1.4: Detlef Kelbassa and Corinna Kuhn's *Refugium II* in the ore bunkers at Landscape Park Duisburg North. The poster of hogweed (*Heracleum mantegazzianum*), the information placard, and the sculpture of the *Wandersprosse* (*Stirps vagans muelleri*) in the back are part of Kelbassa's and Kuhn's installation. Photo: Author, 2014.

In the first room that I visited, Kelbassa and Kuhn connected the concept of neophytes with the act of gardening through the example of hogweed, a large perennial with toxic sap. A poster of the flowering plant spanned the far wall of the bunker, separated from the visitor by a relatively orderly array of decorative plants. In front of these, a sign provided information about the biology and toxicology of hogweed, as well as the history of its introduction to Europe as a decorative plant and nectar source for bees. Below the factual information about hogweed, Kelbassa and Kuhn included an introduction to their *Wandersprosse* in a similarly scientific tone. At the very end of the room, visitors could spot the corresponding sculpture: a knobby, tapering, yellow-green appendage that emerged from the ground and bent forward in a semicircular arch.

In their description of hogweed, Kelbassa and Kuhn picked up on the anthropomorphizing tendencies that run throughout the signage of *Industrienatur* at Landscape Park Duisburg North. DeSilvey acknowledges this trend in her account of the site, noting that “Species that would have been classified as invasive in other contexts were distinguished through their association with the site’s industrial past in an inverted value system that gave precedence to the refugees and invaders, the pioneers of a postpastoral nature.”⁴⁰ The value inversion that DeSilvey mentions, which can be seen as part of the goals that Ganser and Dettmar identified for *Industrienatur*, can also be seen in Kelbassa’s and Kuhn’s work. Here, they define neophyte as “ein pflanzlicher Neubürger” (“a botanical new citizen”), thus humanizing the plant and connecting an ecological phenomenon to a broader discussion about migration. On one hand, anthropomorphizing the process of ecological succession helps to make it comprehensible and easier for visitors to value. But on the other hand, it also smoothes over the intricacies of human agency in the politics of racism.

⁴⁰ DeSilvey, pp. 111-112.



Figure 1.5: Part of Kelbassa's and Kuhn's installation in the Landscape Park Duisburg North. At least four of Kelbassa's and Kuhn's sculptures are visible in this shot, including *Wundersame* (*Faba mirabilis* [cunctator m.]), two versions of *Blaublütiger Tentakel* [*Flos caeruleus mollis*],” and a red tendril with white spots. Photo: Author, 2014.

Spontaneous vegetation filled the space of the second bunker room I visited, where Kelbassa and Kuhn hid their sculptures among the foliage. By making these “zoobotanical biomorphic phenomena” look at home among the flourishing neophytes, the artists integrate their own creative program into that of the surrounding *Industrienatur*. These sculptures offer playful exaggerations of the kinds of “farbenprächtige Blütenfülle und skurrile Wuchsformen” that the *Route der Industrienatur* signs promise. With signs that introduce both factual and fictitious organisms, the installation creates an artistically amplified analogue to the experience of learning about, seeking out, and recognizing the diverse species of flora and fauna that constitute *Industrienatur*. *Refugien II* thus supports Dettmar’s assertion that both scientific and artistic vision are necessary in the transformation of visitors’ perceptions. Yet Kelbassa’s and Kuhn’s artworks and signs play with the conventions that the *Route der Industrienatur* has established, and reveal that an appreciation of *Industrienatur* can be cultivated through forms of fun, humor, and wonder that blur the distinction between science and art.

As seen here, the appeal of *Industrienatur* goes beyond the beauty and fascination that Ganser and Dettmar identified, to include an integral element of fun. To varying degrees, each of the case studies that I analyze in this dissertation offer some kind of additional attraction, whether in the form of areas for play and sport, humorous or ironic artworks, or even structures to climb, infiltrate, or cover in graffiti. Perhaps Ganser and Dettmar did not include these aspects in their accounts of *Industrienatur* because they do not directly contribute to the visitor’s appreciation of the specific beauty or the historical and ecological value of former industrial sites. Yet these kinds of experiences of the post-industrial landscape are as important to some visitors as more contemplative, aesthetic moments may be to others. And in many cases, these different uses of the sites can take place concurrently. This ability of post-industrial landscape

aesthetics to appeal to a broad audience with a wide range of interests is a topic that I will return to in the fourth chapter.



Figure 1.6: Visitors looking at tadpoles in the ore bunkers at Landscape Park Duisburg North. Reflections of *Brutstätte* by Detlef Kelbassa and Corinna Kuhn can be seen above. Photo: Author, 2014.

In the third room, Kelbassa and Kuhn installed their *Brutstätte* (“Breeding Grounds”) over a pool of standing water where frogs and aquatic insects breed. This piece consists of many smaller, oddly-shaped sculptures resembling misshapen sea creatures, body parts, plants, mechanical joints, and everyday objects, strung together in a red web. The artists’ placement of *Brutstätte* over an actual breeding pool provides yet another example of their engagement with the biotope of the post-industrial landscape.

Here I saw visitors interacting with the nature and art in different ways. A group of adults and children examined the swarms of tadpoles that swam in the shallow water, and seemed

disinterested at that moment in Kelbassa's and Kuhn's sculptures above. At the same time, other adults took pictures of the space and the sculptures, seemingly oblivious to the spontaneous lifeforms that thrived in the incidental pool.

These different reactions to the room reveal an obvious, but often overlooked aspect of *Industrienatur*: the fact that visitors will perceive it in different ways. For some visitors, "wild" animals are more engaging than plants, texts, and sculptures. This might be because things that move may excite us more than those that don't, or because we as cognitive animals can somehow relate to other animals (e.g., through anthropomorphization) more easily than with plants. For other visitors, plants may be the main attraction. People concerned with ecology or landscape design might pay special attention to botanical details that others pass by, while those who enjoy the aesthetics of ruination might marvel at plants' abilities to thrive despite the environmental excesses of bygone industry. Yet another group of visitors may come to contemplate the art, or to participate in the artistic interpretation of the site by taking their own photographs or by painting *en plein air*, as DeSilvey notes.⁴¹ Finally, some visitors may only engage with *Industrienatur* to the extent that they make use of the park as a recreational destination. Even this list does not exhaust the ways in which visitors can engage with the *Industrienatur* at Landscape Park Duisburg North.

⁴¹ She writes: "Slightly farther from the center, the uses of the site became more loose and improvisational: teenagers roamed in packs and left their traces (love locks, beer bottles) behind in odd corners and ostensibly off-limits areas. Climbers scaled the walls of the pitted concrete bunkers (one of the climbs entitled "Monte Thyso"), and artists daubed *en plein air* portraits of tangled steel and brooding machinery." *Ibid.*, pp. 105-106.



Figure 1.7: Ulrich Rückriem's untitled sculpture in the "Sculpture Forest" at Zeche Zollverein. Photo: Author, 2018.

The Art of *Industrienatur* at Zeche Zollverein

Like Landscape Park Duisburg North, the UNESCO World Heritage Site Zollverein Coal Mine Industrial Complex (Zeche Zollverein) is an anchor point on the *Route der Industrienatur*. Here, too, the combination of informational signage, art installations, and the landscaping of the decommissioned industrial site contribute to the goals that Ganser and Dettmar articulated for *Industrienatur*. While scholars who have written about Zeche Zollverein have generally focused on Fritz Schupp and Martin Kremmer's historic architecture and the site's museums, I will turn my attention to the post-industrial landscape.⁴² The landscaping Zeche Zollverein's grounds took place in the mid-1990s as part of the IBA Emscher Park, and involved the preservation and artistic accentuation of the industrially-formed terrain. With the installation of Ulrich Rückriem's large granite sculptures in 1995, the mining tip between the coal-washing plant and the coking plant became a *Skulpturenwald* ("Sculpture forest") in addition to its status as an *Industriewald* ("Industrial forest").⁴³

The pairing of *Skulpturenwald* and *Industriewald* was one of the IBA Emscher Park's strategies for creating publicly accessible *Industrienatur* at sites where renovation of the grounds or remaining industrial structures would not be tenable.⁴⁴ The most prominent example of these, which I will discuss in the third chapter, is Herman Prigann's *Skulpturenwald/Industriewald Rheinelbe mit Himmelstreppe* ("Sculpture-/Industrial Forest Rheinelbe with Stairway to Heaven") in Gelsenkirchen. In both cases, the installation of sculptures constitutes an artistic way to mark the landscape as a post-industrial space, where the spontaneous growth of new

⁴² See, for example: James-Chakraborty, Kathleen. "Inventing Industrial Culture in Essen." *Beyond Berlin: Twelve German Cities Confront the Nazi Past*, Rosenfeld, Gavriel David and Paul B. Jaskot, editors, Ann Arbor: University of Michigan Press, 2008, pp. 116-139. See also: Barndt, Kerstin. "Layers of Time: Industrial Ruins and Exhibitionary Temporalities." *Publications of the Modern Language Association of America*, vol. 125, no. 1, Baltimore: Modern Language Association of America, 2010, pp. 134-49.

⁴³ Knierim, Winfried. "Ein Park auf Zeche Zollverein." *Topos. European Landscape Magazine*, Munich: Callwey, 1996, pp. 22-28.

⁴⁴ Dettmar, Ganser, and Latz, pp. 146-153.

forest might otherwise obscure the site's former purpose.

At Zeche Zollverein, Rückriem's sculptures offer a subtle contrast to the surrounding area. The irregular surface of the stone and the remains of dynamite bore-holes suggest a roughly quarried provenance that, despite being a matter of mining, conflicts with Zollverein's (projected) image of modernized coal extraction. And unlike the way in which the station posts reflect the color of nearby art and architecture, the granite blocks don't seem to fit in. Although made of natural, minimally processed materials, they appear alien and artificial in the surrounding landscape.



Figure 1.8: Post for “Station 4: Industriewald” at Zeche Zollverein. Photo: Author, 2018.

As of December 2016, visitors can experience the *Industrienatur* of Zollverein by walking along a “Naturpfad” (“Nature trail”) with twelve stations that explain the site’s terrain, flora, and fauna. The *Rundweg “Natur auf Zollverein”* (“Loop Trail ‘Nature at Zollverein’”) winds from the Zollverein colliery, over the recultivated mining tip, around the coking plant, and back. Along the trail, twelve stations marked by weathering steel posts with QR-codes offer information about flora, fauna, and soil conditions to visitors equipped with smart phones.⁴⁵ If the visitor follows the trail and accesses each of the web pages linked through the QR-codes, they will learn about ecological terminology (such as “neophyte” and “succession”), the diversity of rare species that thrive there, how the Ruhr landscapes of mining tips was formed, and what the Zollverein Foundation is currently doing with the site.

In addition to providing information, the web pages of the loop trail’s stations also engage a variety of senses. Audiovisual materials such as recordings of insects, birds, and frogs, as well as photographs of various aspects of the site, provide both positive identification for any sounds and sights the visitor might have noticed, and substitutes for those that might have been out of season or gone undetected. Information about the Zollverein Foundation’s dye gardens and highly pigmented vegetation (such as poppy and elderberry) and its apiary (whose honey visitors can purchase at the colliery and coking plant gift shops) evokes pleasant flavors. These mediated experiences thus augment what the visitor perceives along the trail, and can even bring remote sensory associations to the fore.

The minimalist design of the station posts resonates with several regional contexts.

Weathering steel, such as the trademarked brand-name COR-TEN, forms a rust-like patina of

⁴⁵ The twelve stations are: 1: *Neue Pflanzen – Neophyte* (“New Plants – Neophytes”) 2: *Pioniere und Überlebenskünstler* (“Pioneers and Survivors”), 3: *Sukzession* (“[Ecological] Succession”), 4: *Industriewald* (“Industrial Forest”), 5: *Wasserpflanzen und -tiere* (“Water Plants and Animals”), 6: *Bergehalde* (“Mining Waste Tips”), 7: *Färbergarten Zollverein* (“Dye Garden Zollverein”), 8: *Insekten* (“Insects”), 9: *Fledermäuse* (“Bats”), 10: *Gebüsch und Vorwald* (“Bushes and Pioneer Forest”), 11: *Bienen und Bienenstock* (“Bees and Beehive”), and 12: *Gebäudenutzer* (“Building Users”).

oxidation that both prevents further corrosion. Here, the aesthetic qualities of the material reflect not only general associations of industrial heritage with rust, but also the nearby works of Richard Serra (*Elevation Circles: In and Out*, 1972-1977, and *Terminal*, 1977, in Bochum, *Bramme für das Ruhrgebiet*, 1998, atop the Schurenbach mining tip), and the color of the brick walls and the anti-corrosion coating used on the Zollverein buildings as well. The station posts are visible from afar, yet do not seem out of place in a landscape where chlorophyll-green and rust-red appear together so frequently.

It may become more exciting to explore the other trails, or what might falsely appear to be trails, or to leave them altogether, than to follow any prescribed route through the site. In doing so, the visitor can immerse themselves in the terrain, wander through areas where only vegetation, animals, and the earth can be perceived, and then encounter an overgrown part of Zollverein's infrastructure hidden among the trees, or glimpse a smokestack reaching above them. As stated on every Emscher Landscape Park sign throughout the Ruhr, "Diese Industrienatur zwischen Halden, Zechen und Hochöfen fasziniert durch wilde Schönheit im Kontrast zu monumentalen Industrierelikten."

Chapter Outline

As stated above, I will focus on landscapes of coal mining in this dissertation. After this introductory chapter, I will proceed through a series of chapters, in which I focus on case studies that progress from the most temporary, least intensive interventions in the post-industrial landscape, to the most extensive, permanent additions. As the scale of the interventions increase, the degree to which visitors have direct access to the landscapes created by coal mining decreases. This progression will also be marked by a focal transition from the post-industrial lake

districts of former lignite strip mines in Saxony-Anhalt to the forests and mountains of the Ruhr's anthracite mining landscape, with the third chapter serving as a bridge between the two.

In the second chapter, I analyze Bertram Weisshaar's "staged walks" and "transitory gardens" in the Golpa North opencast mine. After an initial encounter with the IGR in the early 1990s, Weisshaar began to work with the Bauhaus Dessau to host walking tours of the decommissioned strip mine at Golpa North, which Weisshaar punctuated with theatrical interludes and small land art installations. This will be the only chapter for which I have no firsthand experience to work with, because the art events were temporary, and the site has since been flooded in order to create a lake. I will examine Weisshaar's references to eighteenth century theories of the sublime and garden design, to the works of Robert Smithson, and to natural history museums as points of intersection between historical aesthetic categories and post-industrial landscape aesthetics.

In the third chapter, I bridge my analyses of projects from the IBA Emscher Park and the EXPO 2000. My examples come from both the Ruhr's post-mining landscape and the Goitzsche strip-mine-turned-lake near Bitterfeld, and include two works each by Wolfgang Christ and Hermann Prigann. Christ erected panoramic viewing structures – a skeletal tetrahedron and a floating tower – from which visitors can physically experience and survey the transformation of post-industrial landscapes. Prigann created land art that accentuated "natural" terrain features, such as forests, mountains, and rivers, in the environments that spontaneously arose in the wake of deindustrialization. The forms, locations, and experiential qualities of Christ's lookout towers, I argue, symbolize the intents of the IBA Emscher Park and the EXPO 2000 to act as catalysts for sustainable regional growth. Prigann's works likewise symbolize change, but with a greater emphasis on the past and on alternative futures, with the force of nature as a collaborator in

creating landscape. Additionally, I expand the theoretical implications of post-industrial landscape aesthetics by placing these works into dialogue with Hartmut and Gernot Böhme's philosophies of nature aesthetics and their cultural history of the elements fire, water, earth, and air.

In the fourth chapter, I return to a site in the Emscher Landscape Park that features the architecture of Fritz Schupp and Martin Kremmer, namely Nordsternpark in Gelsenkirchen. Here the *Bundesgartenschau* (BUGA) 1997, Germany's biennial horticultural show, involved transforming the entire landscape surrounding and including the Zeche Nordstern into a landscape park full of gardens, music, and art. I analyze an original song by Heino, an installation by Dani Karavan and Hans-Ulrich Humpert, a sculpture by Markus Lüpertz, and the grounds of the Nordsternpark itself through the lens of Charles Jencks' theories of post-modern architecture. By doing so, I connect the multivalence, eclecticism, and playfulness of post-industrial landscape aesthetics to what Jencks calls "double-coding." While this concept refers primarily to a means of addressing multiple audiences at the same time, it also entails several dynamic tensions between binary opposites such as new/old, subversive/accommodating, and elite/popular. In the context of this dissertation, "double coding" helps to explain not only how post-industrial landscape aesthetics can appeal to a wide range of visitors, but also how it can encompass complex temporalities and reconcile the categories of nature and industry.

Conclusion

Industrienatur plays a fundamental role in each of the case studies in this dissertation. To be clear, the term itself does not always appear explicitly, whether on signs at the sites, or in the writings of the creators involved. However, the logic of the overlap between nature and

industry—two apparently contradictory terms—and the role of artistic intervention in shaping the visitor’s experience remain constant. Like DeSilvey, I find the concept of *Industrienatur* curious, and I believe that the term’s ability to pique curiosity reflects Ganser’s and Dettmar’s success in communicating some essential wonder that is at work in these sites. By articulating post-industrial landscape aesthetics through my analyses of the following case studies, I aim to bring more clarity to how this mix of industrial remains, altered terrain, spontaneous life, and artistic intervention works on the visitor.

CHAPTER II

Wandeln in der Grube. Post-Industrial Landscape Aesthetics of the Golpa North Strip Mine

If you take a stroll along the shallow, sandy banks of Lake Gremmin, a few kilometers east of Dessau, you might happen upon a message in a test tube washed up on the shore. On the brightly-colored slip of paper sealed within, you will discover two things: on one side, the words “Flaschenpost der Sehnsüchte. Nachricht aus dem Land unter dem See. Golpa Nord 1999” (“Message of yearnings in a bottle. News from the land under the lake”), printed with a simple illustration of a stick figure walking over conical ridges; on the other side, a message written on a hot summer day by one of the last of the six thousand visitors who partook in walking tours of the opencast coal mine Golpa North. This mine no longer exists: beginning in 2000, the mine was flooded to create Lake Gremmin.⁴⁶ The artificial lake bears the name of a small town that was evacuated and demolished in order to clear the surface for the Golpa North mine’s expansion.⁴⁷ And the cheerful piece of paper came from a brief interim, during which the decommissioned Golpa North mine was accessible to visitors from 1995 to 1999. Bertram Weisshaar worked with the newly reopened Bauhaus Dessau and its *Industrielles Gartenreich* program (“Industrial Garden Realm,” hereafter IGR, 1989-1999) to transform the mine into a site for walking tours and land art that invited the visitor to experience nature and industry.

⁴⁶ This was achieved by redirecting 73 million cubic meters of water from the nearby Mulde River into the mine. Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH (LMBV). *06. Golpa-Nord/Gröbern. Series: Wandlungen und Perspektiven. Mitteldeutsches Braunkohlenrevier*. Senftenberg: LMBV Unternehmenskommunikation, 2010, pp. 14.

⁴⁷ Ibid., pp. 10, 27. Altogether 142 residents, as well as 15 people living in the northern outskirts of neighboring Gräfenhainichen were relocated. The town’s houses and church were subsequently demolished, its graves relocated to the cemetery in Gräfenhainichen, and the extraction of lignite continued.



Figure 2.1: Lake Gremmin. Photo: Author, 2015.



Figure 2.2: “Flaschenpost der Sehnsüchte,” and “Nachricht aus dem Land unter dem See.” Hoppenhaus, Kerstin and Edda Müller. *Die Entdeckung der Zwischenzeit. Spaziergangsforscher im Restloch*. Dessau, 2000. VHS.

In 1993 Bertram Weisshaar, a photographer and student of landscape planning, came into contact with the IGR through a group project that he initiated as a student of landscape planning at the Gesamthochschule Kassel.⁴⁸ During a Bauhaus-led excursion at Golpa North, Weisshaar

⁴⁸ This project examined the transformation of landscape through opencast mining in Germany. Weisshaar and his

decided to stage a walk in the mine; the Bauhaus' working relationship with the mine remediation agency made it possible to open the site to visitors. The success of this first "inszenierter Spaziergang" ("staged walk") in 1995 led Weisshaar and the Bauhaus to continue to offer such walks through the mine, until 1999, when the mine was closed for flooding.

In the process of preparing installations for the walks, Weisshaar happened upon a vein of work that he wished to explore in greater depth: the physical transformation of the post-mining landscape through "transitory gardens."⁴⁹ Weisshaar made this the topic of his diploma thesis *Transitorische Gärten: Gartenexperimente in dem Braunkohletagebau Golpa-Nord* (1996).⁵⁰ In this thesis, the adjective "transitory" described not only Weisshaar's gardens, but also the post-mining landscape itself.⁵¹ The temporary nature of its use and its rapid change in the face of human intervention, weather, and ecological succession made "the transitory," as Weisshaar put it, the "character of this landscape."⁵² Weisshaar later initiated series of Bauhaus workshops that he co-taught on gardening in the opencast mine. The so-called "Claim Summers" took place in 1997 and 1998, and students and landscape architects were invited from across

colleagues studies three areas: the Garzweiler and Inden mines in North-Rhine Westphalia, the Espenhain mine south of Leipzig, and the Golpa North mine at Gräfenhainichen.

⁴⁹ Weisshaar was not the first to propose the idea of gardens in the mine, but rather the first to execute the idea. In April-May of 1993, a Bauhaus workshop on "Wasser-Sustainability" proposed ideas for water gardens in Golpa North. In January 1994, the ideas for Ferropolis and these water gardens were presented to a state work group whose task was to evaluate the preparation for the EXPO 2000, and a letter was sent to Karl Ganser about these ideas. The following April, the state department of heritage preservation inscribed the excavators at Golpa North into the registered landmark list. "Wasser Sustainability II" took place between April and June. At the end of the month, Karl Ganser organized an event at Golpa North and session on Ferropolis and the design of the opencast mining landscape. Source: *FERROPOLIS. Stadt aus Eisen*. EXPO 2000 Sachsen-Anhalt GmbH. January 1996. LASA, L 32, Nr. S 9.

⁵⁰ Professors Lucius Burckhardt and Jürgen von Reuß served as advisors for this thesis. Burckhardt's "Spaziergangswissenschaft" provided a model for Weisshaar's walks, but Weisshaar recalls that von Reuß was more involved in the project.

⁵¹ As examples of "transitory gardens" from around the world that inspired his work, Weisshaar described gardens of homeless individuals in New York City, decoratively cultivated tree pits on streets of Kassel, artificial islands from the chinampas of the Nahua Aztecs to the kibashas of the Madan and the pearl farms of Shima, Japan, sand castles, and the garden festival of Chaumont-sur-Loire. Weisshaar, Bertram. *Transitorische Gärten. Gartenexperimente in dem Braunkohletagebau Golpa-Nord*. Kassel: Fachbereich Stadtplanung, Landschaftsplanung Universität Gesamthochschule Kassel, 1996.

⁵² Ibid., pp. 68.

Germany to participate in the workshops and produce their own gardens (on “claims” staked by the participants) in the mine, and these gardens subsequently became part of the walks.

In the written accompaniments to his staged walks and transitory gardens, Weisshaar orients his project within a larger context of art history and aesthetic theory. Among the wide range of sources that he refers to, the concept of the sublime, the historic Dessau-Wörlitz Garden Realm, and the works of Robert Smithson are particularly prominent. By aligning his work with art and philosophy that extends from the 18th century to the 20th, Weisshaar appeals to high art and aesthetic theory. He balances this intellectual aspect of his work with playful and bawdy elements, most notably his multiple references to Priapus, the perpetually aroused deity of gardens. But even this playfulness comes in the form of a new interpretation the Roman pantheon, with which Weisshaar creates a new mythology for the landscape of the mine. The vision of the project that Weisshaar’s writings and interviews express thus creates the impression of a highly intellectual eclecticism that subverts its own seriousness through subtle playfulness—in short, a very post-modern art experience of the post-industrial landscape.⁵³

Weisshaar was not the only one responsible for the development of these walks and gardens, and other sources grant different perspectives on the nature of the project. In a short documentary film of the walks and gardens, entitled *Die Entdeckung der Zwischenzeit: Spaziergangsforscher im Restloch* (“The Discovery of the Interim: Strollologists in the Remnant Pit”), Weisshaar’s collaborators Katja Heinecke and Reinhard Krehl share screen time with the originator, and offer their own insights into the tours, while footage of interviews with the walks’ participants give some sense of how the project and the landscape came across.⁵⁴ Heinecke and

⁵³ Here, I refer to “post-modern” in the sense that Charles Jencks theorized within the field of architecture. See the fourth chapter for a more extensive exploration of how the term fits into the post-industrial landscape aesthetics that I study in this dissertation.

⁵⁴ Admittedly, editing and the influence of the camera’s presence limit the range of perspectives offered by these

Krehl, who had studied landscape architecture and “Strollology” with Weisshaar, joined the project in its second year as public interest in the tours grew. Footage of their performances during the walks and talking-head interviews reveal more about the playful elements of the project and its engagement with the post-industrial landscape than Weisshaar’s writings alone. The documentary also shows the vastness of the terrain in long, panning shots, and we see people of all ages hiking through it. Children and adolescents can be seen running around, leaving the trail of participants, and playing in the sand, gravel, and mud of the mine, while more elderly visitors can be heard remarking on the landscape’s beauty.

In this chapter, I explore three main aspects of Weisshaar’s project. The first set of examples that I will examine are Weisshaar’s references to eighteenth-century gardens and aesthetic theories of the sublime. The second example that I will discuss is Weisshaar’s “homage to Robert Smithson,” which ties the abstract physical concept of entropy to tangible phenomena, and makes a larger statement about the post-industrial landscape as a whole. The final example that I will discuss is Weisshaar’s museum of the mine, the so-called “Exile of Priapus.”

Weisshaar included quotes from the historical Dessau-Wörlitz Garden Realm and from C. C. L. Hirschfeld’s *Theory of Garden Art* (1779-1785) in his walks and gardens in the mine. In addition, he made further references to the concept of the sublime in his writings about the experience of walking through opencast coal mines. These references follow the anachronistic logic of the IGR’s name through the combination of 20th-century industrial heritage with the idea of the 18th-century Garden Realm.

Weisshaar’s “homage to Robert Smithson,” began as an enactment of the thought experiment in Smithson’s “A Tour of the Monuments of Passaic, New Jersey” (1967), and ended

interviews. Nevertheless, this documentary remains one of the few records of any participants’ responses, and the footage of them in the landscape offers valuable information about what these walks were like.

as an activity, in which the visitors mixed fruit juices for their own refreshment. While Weisshaar explicitly intended the reference to Smithson to make the visitor think about landscape of Golpa North, the irreversibility of its changes, and by extension, the folly of the plan to flood the mine, the reference also put Weisshaar's projects into contrast with Smithson's works and writings. The closest precedents to what the IGR and the IBA Emscher Park would achieve include Smithson's later land art works.

In the museum entitled "Exile of Priapus", Weisshaar exhibited photographs of towns threatened by opencast mining, materials from the daily workplace of the mine, and samples of nature collected by the visitors during the walks. This museum sat upon a small plateau with a view of the excavators of Ferropolis, and visitors would be treated to grilled sausages as they rested in the area in front of the museum, where informational tablets about the future of the site could be read.



Figure 2.3: Walking tour of Golpa North, 1996. Archiv Stiftung Bauhaus Dessau, D-87.

The Formation of the Post-Industrial Landscape at Golpa North

The conceptual categories of “nature” and “industry” appear throughout the projects in Golpa North in ways that alternately pose the two as antithetical to each other and as part of the same phenomenon. When framed as antithetical concepts in the context of the post-industrial landscape, “nature” often represents an imaginary pre-industrial, untouched landscape, while “industry” indicates both the physical transformation and chemical pollution of the same landscape. In this framing, “nature” holds positive connotations of health and wholeness, while “industry” becomes nature’s polar opposite, or the negation of nature. However, in Weisshaar’s walks and gardens, and within the larger contexts of the IGR and the IBA Emscher Park as well, recognition of the process of ecological succession (through which pioneer vegetation and other ruderal and pollution-resistant flora overgrow the remains of industry and create new

environments) and the concept of *Industrienatur* point to a dissolution of the distinction between the categories of nature and industry.⁵⁵

Although mining at Golpa North began under the German Democratic Republic, the extraction of lignite (also “brown coal,” or German: Braunkohle)⁵⁶ near Gräfenhainichen had taken place since as early as 1875.⁵⁷ Initial excavation of the Golpa North mine began in 1958, and excavators first hit lignite in 1964.⁵⁸ In 1991, the mining completed its circular swath, and Golpa North became the final opencast mine in the region to completely exhaust its lignite supply before being shut down. In the end, seventy million tons of lignite had been extracted, and all that remained was a seventeen-square-kilometer hole in the earth.⁵⁹

⁵⁵ This more inclusive conceptualization of the relationship between nature and industry has strong resonances with theories of the anthropocene, ecoaesthetics, ruderal ecologies, and aesthetics of ruins and decay.

⁵⁶ Lignite (Braunkohle) is the softest grade of coal, with lower carbon content and more impurities than anthracite (Steinkohle; the hardest grade of coal). The difference between these two forms of coal is primarily a function of age: anthracite has undergone the most fossilization over time, and because it is found deeper in the earth, anthracite mining requires mine shafts (Untertagebau); lignite is a comparatively young mineral, and is found close enough to the earth’s surface to make strip- or opencast mining (Tagebau) practicable.

⁵⁷ Large-scale mining accelerated during World War I to provide the Zschornowitz power plant, built in 1915, with a continuous supply of lignite fuel. The world’s largest steam electric plant at the time of its construction, the Zschornowitz plant powered nitrogen works in Piesteritz for explosives and munitions. LMBV 2010, pp. 4. See also: Lenz, Gerhard. *Verlusterfahrung Landschaft. Über die Herstellung von Raum und Umwelt im Mitteldeutschen Industriegebiet seit der Mitte des neunzehnten Jahrhunderts*. Frankfurt am Main: Campus Verlag, 1999, pp. 51. The broader Wittenberg-Bitterfeld-Dessau region also housed facilities for the production of poison gas and film for aerial photography. Energy demand grew through World War II, and to meet this, the Vockerode power plant was built in 1937, and both plants expanded their capacity. In 1957, mining exhausted the lignite supply in last of the region’s opencast mines that had existed prior to 1945. LMBV 2010, pp. 4-5. Although other mines in the wider region continued to supply the Zschornowitz and Vockerode plants, the need to secure further fuel sources led to the establishment of Golpa North.

⁵⁸ Among the mining equipment at this site were bucket-wheel excavators that exposed the coalbed, overburden conveyor bridges that moved the unwanted earth (referred to in mining terminology as “overburden”), bucket-chain excavators that extracted the exposed coal, and further conveyors that placed the coal into trains destined for the nearby power plants at Zschornowitz and Vockerode. These excavators, which moved through the mine on caterpillar treads or repositionable rails, weighed from 792 to 1980 metric tons, reached between 27 and 30 meters high, and ranged from 67 to 125 meters long. See: *Ferropolis — Stadt aus Eisen*. Ferropolis GmbH. Not dated, https://www.ferropolis.de/de/cms/_redaktionell/2/Ferropolis.html. Mining only ceased once, between 1968 and 1972, when plans to switch over to natural gas from the Soviet Union were put into motion, but the gas supply failed to meet local energy demand. Otherwise nothing—not even the evacuation of Gremmin—interrupted or delayed the extraction of lignite. LMBV, 2010, pp. 6-7.

⁵⁹ Mining proceeded in a clockwise motion around a central hub, and carved out a total area of 17 square kilometers. The coalbed was 5 meters thick, and lay beneath 25 meters of clay and sand. Over the course of Golpa North’s active operation, mining extracted 70 million tons of lignite, and displaced 340 million cubic meters of overburden, including 8 million tons of clay that were reserved. To maintain a groundwater level below the depth of the lignite, an approximate total of 425 million tons of water were pumped and redirected to nearby waterways. Kegler, Harald.

The opencast mining process left behind a varied terrain. Descriptions of the region's opencast lignite mines commonly refer to "lunar landscapes" or "deserts." Prior to 1968, most of the overburden produced by the initial excavation ended up in a large pile north of the mine, but after 1972 the operation switched over to a more efficient process of dumping overburden into the exhausted sections of the mine.⁶⁰ This later activity produced conical piles of mixed white, tan, and gray sands, dark chunks of leftover lignite, and brownish clay. These piles were arranged in a network of irregular rows that bore some resemblance to miniature dunes. Wind and rain eroded vein-like grooves into these slopes and piles, and left behind expanses of cracked, dry mud where water collected and evaporated. Certain pits and valleys collected enough water to form permanent pools, some of which were visibly contaminated with mining by-products.

Pollution notwithstanding, water brought flora and fauna to Golpa North. Pioneer vegetation, mostly reeds and grasses, took root in the nutrient-poor ground; cattails and other aquatic plants thrived in the pools. Dragonflies, seagulls, swans, frogs, and occasionally beavers could be found in the pit.⁶¹ Bushes and small trees could be found in older sections of the mine, where this process of growth had already been going on for decades. These flora and fauna were not unique to Golpa North; in fact, the process of ecological succession was so prevalent among disused opencast lignite mines, that in 1994 the Federal Ministry of Education, Science, Research, and Technology funded a five-year research project to study and map the biodiversity

Ferropolis - Die Stadt aus Eisen: Beschreibungen - Erfahrungen - Ausblicke eines ungewöhnlichen Projektes in der Bergbaufolgelandschaft: Festschrift Zum 10. Jubiläum der Stadtgründung: 1995 - 2005. Hamburg: L-und-H-Verlag, 2005, pp. 21-23.

⁶⁰ Ibid., pp. 23

⁶¹ Ullmann, Gerhard. "Zwischen Wüsten und Oasen." *Deutsche Bauzeitung*, Leinfelden-Echterdingen: Konradin Medien GmbH, July 1998, pp. 20-21. See also: Hoppenhaus, Kerstin and Edda Müller. *Die Entdeckung der Zwischenzeit. Spaziergangsforscher im Restloch.* Dessau: alias – Atelier für Spaziergangsforschung, 2000. VHS.

of the sites.⁶²

On August 1, 1991, Golpa North officially entered the process of remediation.⁶³ In the case of opencast lignite mines in Germany, this process involves the continued pumping of groundwater while excavators of the same type as those originally used to extract the coal reduce the slope and thereby stabilize the embankments of the future lake.⁶⁴ At Golpa North, this first stage lasted from 1991 to 2000; the second stage, which consisted of flooding the mine, was planned to take place between 2000 and 2003, but continued through 2012.⁶⁵

From the mid-1990s on, the Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH (LMBV) was the company responsible for managing the region's mines.⁶⁶ These agencies held full authority to determine the fate of the mines, and relied on remediation strategies that had become standard practice. Without their permission, none of the projects of the Bauhaus Dessau or the EXPO 2000 Saxony-Anhalt GmbH could have come to fruition.

⁶² This research was carried out in cooperation with—and was partly funded by—the LMBV. In 1999, the Forschungsverbund Braunkohletagebaulandschaften Mitteldeutschlands (FBM) submitted its final report, “Konzepte für die Erhaltung, Gestaltung und Vernetzung wertvoller Biotope und Sukzessionsflächen in ausgewählten Tagebausystemen”; this document included a concept for the development of a small section of Golpa North as a long-term experimental zone in which to compare the effects of guided and uncontrolled succession “Teilprojekt D. Beispielhafte Untersuchung der Landschaftsentwicklung.” LASA L 16 Nr. 1801.

⁶³ In this dissertation, I refer to remediation in the sense of “Sanierung”: the physical restoration or improvement of an environment that has been impacted by industrial activity.

⁶⁴ At Golpa North, this involved the redistribution of fifteen million cubic meters of the mine's own overburden to reduce the slopes. Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH (LMBV). *Sanierungstagebau Golpa-Nord. Ein Referenzstandort für die EXPO 2000*. Bitterfeld: LMBV, Presse- und Öffentlichkeitsarbeit, 2000.

⁶⁵ Hoppenhaus and Müller.

⁶⁶ Kegler, pp. 19. During the privatization of former GDR-operated throughout in the 1990s, the agency responsible for the site's operation and remediation changed names several times. From 1990 to 1993, the Mitteldeutsche Braunkohle AG (MIBRAG), a part of the Treuhandanstalt, took control of the site. In 1994, the task of remediation shifted to the Treuhand subsidiary Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH (MBV), which was consolidated with its Lusatian counterpart in 1995 to form the LMBV. In 2000, the German federal government became the sole holder of the LMBV when the LMBV and the BMGB, a successor of the Treuhandanstalt, were consolidated.

The Theory of Garden Art Between Nature and Industry

Not only did Weisshaar's staged walks and transitory gardens in Golpa North belong to one of the few projects of the IGR to explicitly involve gardening in some form or other; they also took the IGR's anachronistic impulse within the region's heritage by pitting theories of landscape from the era of Prince Leopold III's Dessau-Wörlitz Garden Realm (17540-1817) against the terrain of opencast lignite mining. Participants of the first walk received postcards, on which Weisshaar had printed passages from Hirschfeld's rules of garden art:

Man untersuche vornehmlich den natürlichen Charakter einer Gegend, die man zu einem Garten bearbeiten will, um sich nach diesem Charakter zu bequemen und von ihm allen Gebrauch zu machen, der nur verstattet wird. Diese Regel ist nur selten beachtet,...

Nicht genug kann es eingeschärft werden, daß man der Natur folgen, nicht aber sie mit gemäßbraucher Arbeit und Kosten verderben, nicht in der Absicht zu verschönern, seltsame Verunstaltungen erzwingen soll; ...

Viele glauben, daß sie erst alles wegräumen müssen, was die Natur wachsen ließ, ehe sie ihre Anpflanzungen anfangen können; und die Erfahrung zeigt, daß sie weit früher und glücklicher ihre Arbeit erreicht hätten, wenn sie der Natur mit mäßigeren Abänderungen und Zusätzen zu Hilfe gekommen wären.⁶⁷

On one hand, the passages can be understood as a historical reference to the eighteenth-century English landscape garden tradition (which entailed the creation of "naturalistic" landscapes, compared to the highly geometric and symmetrical French style of the seventeenth century) that guided or inspired Weisshaar to design his transitory gardens according to the predominant character of the post-mining landscape. On the other hand, Weisshaar's inclusion of these quotes within the mining landscape of Golpa North colors them as criticisms of the LMBV's remediation practices. In particular, the line "Viele glauben, daß sie erst alles wegräumen müssen, was die Natur wachsen ließ" can be read as a dual reference: both to those who created the mine by clearing nature away, and to those who planned to eradicate the environment within the mine by flooding it.

A closer look at Hirschfeld's *Theorie der Gartenkunst* reveals the extent of the tension

⁶⁷ Weisshaar 1996, pp. 17.

between eighteenth-century garden aesthetics and Weisshaar's projects in the mine. The list of rules from which Weisshaar selected his excerpts also includes several points that are contrary to Weisshaar's project. In his very first rule, for instance, Hirschfeld reminds the reader,

Daß man zum Garten keine Gegend wählen müsse, die eine ungesunde Luft hat; die von benachbarten faulenden Sümpfen und Morasten vergiftet ist; die ganz der Tiefe liegt, oder aus lauter dürrer Sanderde besteht; die nur erst durch Hülfe vieler Bearbeitung und Kosten zu einiger Verschönerung zu erheben ist; die entweder gar keine freyen Aussichten gewinnen kann, oder mit nichts als elenden Haiden und sterbenden Gesträuchen rings umher umschlossen ist...⁶⁸

Note that Golpa North was precisely the kind of contaminated, deep-set, sandy area that Hirschfeld ruled against selecting as the place for a garden. In this regard, Weisshaar's reference to the *Theorie der Gartenkunst* contradicts the word of the original while attempting to preserve its meaning as part of the IGR's remix of eighteenth-century garden aesthetics and post-mining landscape design. Weisshaar's goals for the walks and gardens were to promote the aesthetic recognition of the mine as landscape, and to call into question the environmental and historical sensibility LMBV's plans to remediate the mine by flooding it.



Figure 2.4: Photos of Bertram Weisshaar's *Arche Calamagrostis* at different stages of weathering. Photos: Archiv Weisshaar.

A prime example of Weisshaar's transitory gardens in Golpa North was *Arche*

⁶⁸ To be precise, Hirschfeld actually writes that the reader need not be reminded of these rules, after listing them. Hirschfeld, pp. 5.

Calamagrostis (1995-1997).⁶⁹ *Calamagrostis epigejos*, also known as bushgrass or “wood small-reed” (German: *Land-Reitgras*), is the single most dominant plant species in abandoned sections of opencast lignite mines, and is capable of overtaking other plants. In the sequence of ecological succession, it yields to trees and bushes that can overshadow it.⁷⁰

While walking through the mine, Weisshaar found a small valley where bushgrass, a pioneer plant common in former lignite mines, had taken root. He demarcated an ark-shaped area in the densest section of this grass with found wood and a length of rope, and raked and pulled plants from the surrounding soil. Over three years, Weisshaar repeatedly allowed the garden to succumb to erosion and weather cycles of flooding and drying out, and then restored it.

Weisshaar’s artistic work on *Arche Calamagrostis* demonstrates the inextricable relationship between the materiality and temporalities of the post-industrial landscape. The sand and bushgrass change over time, as wind and rain disturb the former, and as the latter strives to expand across the floor of the mine. By periodically restoring the ark-shaped plot of grass and raking away the rest of the new growth, Weisshaar drew attention not only to the labor involved in garden- and landscape art, but also to the forces of entropy that are involved in the process of ecological succession (I shall return to the concept of entropy below). Furthermore, I suggest that the intentional futility of Weisshaar’s performative struggle to restore the ark reflects Weisshaar’s critique of the LMBV’s attempt to “renaturalize” the mine by flooding it. Here, as in the other case studies throughout the dissertation, any effort to “restore” a post-industrial landscape to a seemingly pre-industrial state is a labor- and cost-intensive endeavor that both creates a simulation of an idealized image of nature, and disrupts the spontaneous flora and fauna

⁶⁹ Weisshaar, Bertram. “Von der Sehnsucht nach Wüste in Deutschland. Spaziergänge und transitorische Gärten in Braunkohlelandschaften.” *Spaziergangswissenschaft in Praxis: Formate in Fortbewegung*. Weisshaar, Bertram, and Maren Brauner, editors. Berlin: Jovis, 2013, pp. 49-50.

⁷⁰ See: Huth, Jörg, Hans-Markus Oelerich, Michael Reuter and Sabine Tischew. “Biotoptypen in der Bergbaufolgelandschaft.” *Renaturierung nach dem Braunkohleabbau*, Tischew, Sabine, editor. Stuttgart: BG Teubner, 2004, pp. 55.

that naturally thrive at former industrial sites.

The Sublime of the Mine

Upon setting foot as a visitor in an opencast mine, what seems so impressive at first is the sheer vastness of the space and the machines; slowly, realizations of the scale of destruction that has taken place and the energy that has been expended in the process sink in, and a form of awe arises. In the eighteenth century, English and German philosophers and aestheticians named this thrilling feeling of terror “the sublime,” and studied its causes and effects; the former, however, were not coal mines or machines, but rather landscapes such as mountains and abysses, violent storms, and fearsome beasts. Through the Bauhaus Dessau’s IGR, and its projects in the opencast lignite mine Golpa North in particular, aspects of the sublime began to emerge in the post-industrial landscape.

The concept of the technological sublime is not new, however, nor was it unique to the projects of the IGR and the IBA Emscher Park. David Nye explored this theme in *American Technological Sublime* (1994); he subdivided this technological sublime into several categories including that of industry, which he articulated in the example of textile factories in Manchester in the mid-nineteenth century.⁷¹ The early romanticization of industry produced its own form of the sublime, connected to towering smokestacks, massive machines, and fiery furnaces. What is unique in the case of the projects that I discuss here is the creation of sublime aesthetics through the artistic reuse of sites such as Golpa North.

This is related to but distinct from what Steven High and David Lewis call the “deindustrial sublime” in their studies and photo essays of life in former industrial hubs in North America: their term is tied more closely to feelings of the sublime that arise through nostalgic

⁷¹ Nye, David. *American Technological Sublime*. Cambridge: MIT Press, 1994, pp. 109-142.

and melancholic contemplation of industrial ruins.⁷² The form of post-industrial sublime that visitors could experience at Golpa North during a walking tour of the mine or a visit to Ferropolis was characterized by a focus on the magnitude of the excavators and of the environmental destruction that had taken place.

To be clear, Golpa North was not an inherently sublime site. Although Immanuel Kant included “zum schwermütigen Nachdenken einladend[e] Einöde”⁷³ among sights capable of overwhelming the viewer with feelings of the sublime, the relatively shallow depth of the mine led to difficulty in the endeavor of creating sublime experiences for the visitor. At Golpa North, the lignite seam was at most thirty meters below the original ground level; by comparison, opencast lignite mines in Lusatia, where Rolf Kuhn led the IBA Fürst Pückler Land, ranged from forty to sixty meters deep.⁷⁴

In *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful* (1764), Edmund Burke writes that depth—more than height, and subsequently much more than length—is the dimension with the greatest ability to create feelings of the sublime.⁷⁵ Golpa North’s dimensions made it necessary to accentuate the visitor’s perception of scale, and Weisshaar attended to this in his walks and gardens.

⁷² High and Lewis cite Nye in their brief description of what a “deindustrial sublime” entails. High, Steven and David Lewis. *Corporate Wasteland. The Landscape and Memory of Deindustrialization*. Ithaca: IRL Press, 2007, pp. 52.

⁷³ The full quote reads, “Die Verwunderung, die an Schreck grenzt, das Grausen und der heilige Schauer, welcher den Zuschauer bei dem Anblicke himmelansteigender Gebirgsmassen, tiefer Schlünde und darin tobender Gewässer, tiefbeschatteter, zum schwermütigen Nachdenken einladender Einöden usw. ergreift, ist, bei der Sicherheit, worin er sich weiß, nicht wirkliche Furcht, sondern nur ein Versuch, uns mit der Einbildungskraft darauf einzulassen, um die Macht ebendesselben Vermögens zu fühlen, die dadurch erregte Bewegung des Gemüts mit dem Ruhestande desselben zu verbinden, und so der Natur in uns selbst, mithin auch der außer uns, sofern sie auf das Gefühl unseres Wohlbefindens Einfluß haben kann, überlegen zu sein.” Kant, Immanuel. *Kritik der Urteilskraft*. Lehmann, Gerhard, editor, Stuttgart: Reclam, 1963, pp. 175-176.

⁷⁴ Accordingly, the machines at Golpa North are also much smaller than their counterparts in Lusatia. The tallest machine at Ferropolis reaches thirty-six meters. By comparison, the overburden conveyor bridge F60 in Lusatia, which was preserved and opened to visitors as part of the Fürst Pückler Land, has a viewing platform seventy-five meters from the ground, and the machine itself is eighty meters high and half a kilometer long.

⁷⁵ Burke, Edmund. *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful. The Fourth Edition. With an Introductory Discourse Concerning Taste, and Several Other Additions*. London: R. and J. Dodsley, 1764, pp. 127-128.

In his written account of the first walking tour through Golpa North, Weisshaar generates his own vision of the sublime by describing his ideal visitor, a certain “Herr Möpfer,” at the bottom of the mine during a boat ride:

Aus dieser etwas tieferen Perspektive wirkt diese Landschaft noch größer. Das ständig an den Böschungen nagende Wasser läßt diese gefährlich und unbefahrbar erscheinen. Doch ininigem Abstand zu den abrutschenden Böschungen fühlt sich Herr M in dem Boot sicher. Er möchte diese Erhabenheit fotografieren und merkt doch selbst, daß diese nur direkt im Augenblick erlebbar ist.⁷⁶

In addition to the perspectival magnification of the mine, which reaches its greatest intensity at the greatest depth, Weisshaar touches on a further aspect of the sublime. The dangerous-looking embankments, seen from a safe distance, refer again to Burke’s causes of the sublime, according to which such a removal from mortal peril transforms pure existential fear into the thrilling terror of the sublime.⁷⁷

Access to the mine is restricted; only with permission of the MBV and at one's own risk may Herr Möpfer and the others walk in the mine. Weisshaar notes an accident, only weeks earlier, in which a miner dies in the collapse of an embankment that was thought to have been safe. This danger constitutes part of the sublimity of the mining landscape, as Weisshaar notes in a subsequent article, “Hinein in das Land der Tiefe! Ein Plädoyer für Expeditionen, Spaziergänge und Transitorische Gärten in der Bergbaulandschaft” (1996). In this article, Weisshaar writes of the experience of beauty and terror in his walks through opencast lignite mines. He praises the color and forms of sand dunes shaped by erosion, and their labyrinthine organization as “paradiesisch,” and argues that the beauty of the landscape would be obvious to all, were it not at the bottom of a former mine. In contrast to this, visible signs of collapse and knowledge of invisible dangers create terror. Not only do collapsed embankments attest to the failure of mining engineers to guarantee safety, but signs warn of poisonous chemicals left over

⁷⁶ Weisshaar, Bertram. *Golpa-Nord*. 6. Mai 1995. *Spaziergang durch den Tagebau*. Dessau: Bauhaus Dessau, 1995.

⁷⁷ Burke, pp. 60.

from mining and emissions of nearby cooling towers. In view of a collapsed section of a mine south of Leipzig, Weisshaar writes: “Aus reichlichem Abstand zur Abbruchkante kann ich dies Bild des entfesselten, doch für mich nunmehr ungefährlichen Schreckens mit einem erhabenen Gefühl betrachten.”⁷⁸ These aesthetic aspects of the landscape—the beautiful and the sublime—only arise in the view of the amateur explorer, however. Weisshaar writes of the potential value of former miners' experience for leading walking tours safely through the mine, but notes that their training and knowledge render the landscape commonplace, rather than extraordinary. Yet it might nevertheless be possible, that the artistic, humorous, and reflective aspects of Weisshaar's art could defamiliarize former miners with their workplace associations of the site, and give them an opportunity to see it anew, as an aesthetic space.

Weisshaar's mentor Lucius Burckhardt was reluctant to attribute the categories of the “delightful” (he uses “lieblich” instead of “schön”) and the sublime to Golpa North. In an article for the *Basler Zeitung* entitled “Die Ästhetik des Restlochs — lieblich und erhaben” (1999), Burckhardt admitted that of the two, the sublime described the mine better than the delightful, but only as long as the site remained above water. Burckhardt recognized the delightful, on the other hand, as a product of, and limited to, Weisshaar's walks and gardens. Both of these categories, he wrote, would ultimately disappear with the flooding: “Das Liebliche entschwindet kurzfristig mit dem jeweils letzten Spaziergang der Saison; die Erhabenheit zieht sich langfristig durch den Anstieg des Grundwassers zurück.”⁷⁹ Yet precisely this transitory temporality of the landscape's aesthetics runs throughout Weisshaar's walks and gardens in the mine.

⁷⁸ Weisshaar, Bertram. “Hinein in das Land in der Tiefe! Ein Plädoyer für Expeditionen, Spaziergänge und transitorische Gärten in der Bergbaulandschaft” *Jahrbuch Bergbaufolgelandschaft*. Leipzig: Dachverband Bergbaufolgelandschaft & Stiftung Bauhaus Dessau, 1996, pp. 146-151.

⁷⁹ Burckhardt, Lucius. “Die Ästhetik des Restlochs — lieblich und erhaben.” *Basler Magazin*. Basel: Basler Zeitung. No. 20, May 29, 1999, pp. 12-13.

An “Homage to Robert Smithson”

At the start of Weisshaar’s first walk in Golpa North on May 6, 1995, he introduced the metaphor of entropy as part of his critique of the remediation of the mine through flooding. Weisshaar’s first stop was a square that has been drawn in the sand. A volunteer is asked to walk three times in a circle within the square, thereby disturbing the previously untouched sand surface; this person is then asked to walk three times in a circle in the opposite direction in order to reverse the impact. Weisshaar designed the activity as a live enactment of Robert Smithson’s thought experiment from “A Tour of the Monuments of Passaic, New Jersey” (1967). Smithson’s version prompts the reader to

Picture in your mind’s eye the sand box divided in half with black sand on one side and white sand on the other. We take a child and have him run hundreds of times clockwise in the box until the sand gets mixed and begins to turn grey; after that we have him run anti-clockwise, but the result will not be a restoration of the original division but a greater degree of greyness and an increase of entropy.⁸⁰

Under the keywords “Entropie, Ordnung, Arbeit,” the pamphlet held by the walk participants contained an illustration of a cartoonish figure looking at three squares: the first is divided sharply into black and white halves, the second is divided into dark and light gray halves, and the third is filled with a uniform neutral gray. Later, this experiment would be reformulated to be more interactive, and to sate the thirst of walk participants after hours under the summer sun in the shade-less mine.

⁸⁰ Smithson, Robert. “A Tour of the Monuments of Passaic, New Jersey.” *Robert Smithson: The Collected Writings*. Flam, Jack, editor, Berkeley: University of California Press, 1996, pp. 68-74.



Figure 2.5: Reinhard Krehl performing the “KiBa Versuch” (Cherry-Banana Experiment). Photo: Archiv Weisshaar.

In *Die Entdeckung der Zwischenzeit*, we see Krehl in a lab coat perform an experiment with colorful beverages in laboratory glassware in order to illustrate the same principle, but without the term “entropy.”⁸¹ Krehl begins by filling the glass halfway with opaque yellow banana juice. Using a separatory funnel, he then adds a clear layer of red cherry juicy to the bottom of the glass, such that two distinct layers form. While delivering a speech about the destruction of the pre-industrial landscape through strip mining, Krehl slowly stirs the two layers together with a straw. He then describes the LMBV’s attempt to restore post-industrial landscape to its original form through the process of remediation, and stirs the glass in the opposite direction. Pointing out the fact that reversing the direction of his action has not caused the drink to return to its original layering, Krehl notes that flooding the mine cannot reverse the damage

⁸¹ This “KiBa Versuch” (“Cherry-Banana Experiment”) would later be repeated by others who led walking tours through the opencast lignite mines in Lusatia during the IBA Fürst-Pückler-Land.

caused by mining in the first place.

Smithson's Dialectical Landscape

The relationship between nature and industry in Weisshaar's projects was more conciliatory than in Smithson's works. As I have described above, the conflation of nature and industry, particularly in reference to ecological succession, is a major theme in Weisshaar's projects and in the IGR, IBA Emscher Park, and Expo 2000 in general. For Smithson, who wrote of a "dialectical landscape," the contrast between the natural and the industrial made land art interesting. The differences between these views of the relationship between nature and industry are specially noteworthy in consideration of the environmental and theoretical similarities between the two artists' projects. In his homage to Smithson, however, Weisshaar omits reference to the latter's work in quarries and opencast mines.

In the 1970s, Smithson conceived of a series of "Land Reclamation" projects that would have been realized in industrial landscapes, had it not been for the lack of cooperation from the respective industries, and for Smithson's untimely death.⁸² Of these projects, only *Broken Circle/Spiral Hill* (Holland, 1971), which consisted of a hill with a spiral path to the top and a combined jetty and a canal that formed a broken circle on the shore of an old quarry, was ever completed. Other projects, such as his plans for the Egypt Valley mine in Ohio (1972) and for the Bingham Copper Mining Pit in Utah (1973), fell through.⁸³ Prior to these projects, Smithson had expressed interest in building a cinema in a cave or abandoned mine.⁸⁴ With *Broken Circle/Spiral Hill*, he wanted to find a "raw" area, "because Holland is so pastoral, so completely

⁸² Vöckler, Kai. "The Entropic Landscape." *Robert Smithson. Die Erfindung der Landschaft. The Invention of Landscape. Broken Circle/Spiral Hill & Film*. Köln: Snoeck, 2012, pp. 81.

⁸³ *Ibid.*, 81.

⁸⁴ Smithson, pp. 142.

cultivated and so much an earthwork in itself that I wanted to find an area that I could mold, such as a quarry or a disused mining area.”⁸⁵ Smithson’s interest in mining sites wasn’t exclusively based on his freedom to intervene in the landscape, however: the logic of ecological remediation of mines in the US puzzled him, and resonated with his ongoing contemplation of entropy.

Although some of Smithson’s success in having convinced the Dutch mining authorities to permit his projects may have to do with different conceptions of the cultural value of such art in continental Europe and in the United States, there is a significant overlap between the laws regarding ecological restoration of mines that Smithson encountered and those which governed the LMBV’s remediation of Golpa North. In an interview from 1973, Smithson spoke about his conversations with mining officials about United States land reclamation laws:

It seems that when they made up the laws for mining reclamation they wanted to put back the mines the way they were before they mined them. ... It seems that the reclamation laws really don’t deal with specific sites, they deal with a general dream or an ideal world long gone. It’s an attempt to recover a frontier or a wilderness that no longer exists. Here we have to accept the entropic situation and more or less learn how to reincorporate these things that seem ugly.⁸⁶

Smithson’s concept of the entropy goes beyond physical manifestations of disorder, erosion, and decay. While conversant in the second law of thermodynamics and in the meanings of entropy in other scientific and theoretical fields, he also uses the concept metaphorically to describe phenomena ranging from the energy crisis, the Watergate scandal, and the creation and abandonment of the Salton Sea.⁸⁷ In the case of opencast mines, Smithson’s fascination with the impracticality of US land reclamation laws that mandated the restoration of a prior state of nature is reflected in the implicit criticism found in Weisshaar’s homage. Smithson recalls a conversation with a mining official, who said that it would require thirty years and the displacement of a mountain’s worth of earth to restore the Bingham pit to its previous

⁸⁵ Ibid., pp. 253.

⁸⁶ Ibid., 307.

⁸⁷ Ibid., 301-305.

appearance.⁸⁸

In the central German lignite mining region, although the standard practice of filling disused mines with water meant that no earth had to be moved into the mine from other sites, the energy expended by excavators in the process of stabilizing the shores of the future lake was no less than that which they required to mine lignite; the only difference was that this latter expenditure was not offset by the energy produced from the harvested lignite. The degree to which massive amounts of energy would be required in either case to create a new landscape in the image of a previous “nature” and the illusory status of such a reversal constitute the link between the two artists’ engagements with opencast mining and the concept of entropy.

While Weisshaar emphasized the act of walking through the mine and experiencing it firsthand with one’s senses, Smithson’s writings often give priority to a type of vision heavily influenced by photography and cinema. Smithson’s “Tour of Passaic, NJ,” the basis for Weisshaar’s experiment, illustrates the latter point particularly clearly.

Smithson’s concept of entropy included a notion of irreversibility that informed Weisshaar’s interpretation. In Smithson’s tour of Passaic, the medium of film creates the illusion of this possibility of reverse entropy, at least temporarily:

Of course, if we filmed such an experiment we could prove the reversibility of eternity by showing the film backwards, but then sooner or later the film itself would crumble or get lost and enter the state of irreversibility. Somehow this suggests that the camera offers an illusive or temporary escape from physical dissolution. The false immortality of the film gives the viewer an illusion of control over eternity—but “the superstars” are fading.⁸⁹

Smithson extends the power of entropy and irreversibility to the medium’s materiality, and thereby exposes the illusion as such.⁹⁰ In Weisshaar’s enactment of the sand experiment and the

⁸⁸ Ibid., 307.

⁸⁹ Ibid., 74.

⁹⁰ The idea of playing a film of entropy, collapse, or ruin in reverse was first staged by the Lumière brothers with their film *Demolition of a Wall* in 1895, as Johannes von Moltke reminds us. In contrast to the Lumières’ original spectacle, which “captures a transient temporal moment—a moment of destruction—and negates the irreversibility

later KiBa Versuch, the absence of literary and filmic mediation makes the materiality of entropy as a physical process apparent to the visitor. With that conceptual burden lifted, the criticism against the flooding of the mine as a futile attempt to cover up the damage caused by industry becomes clearer.

On the surface, both Smithson's text and Weisshaar's walks and gardens are acts of traveling to and wandering through landscapes of sand and water that have been shaped by industrial processes. Yet Smithson's visual impressions take filmic forms, both photographic and cinematic, and Smithson reflects that he "was completely controlled by the Instamatic (or what rationalists call a camera). The glassy air of New Jersey defined the structural parts of the monument as I took snapshot after snapshot."⁹¹ Smithson sees the scene as though through a camera lens; the bright sunlight over-exposes his view of a bridge.

of temporality." Von Moltke, Johannes. "Ruin Cinema." *Ruins of Modernity*. Durham, N.C.: Duke University Press, 2010, pp. 395, 397.

⁹¹ Smithson, pp. 70.



Figure 2.6: Rest stop at the “Exile of Priapus.” Photo Archiv Weisshaar.

The “Exile of Priapus”

In 1997, Weisshaar converted a portable wooden shack used by the miners into what he called the “Museum ‘Exil des Priapos.’” Here, Weisshaar invoked the Greek god Priapus as the protector deity of gardens, yet downplayed the god’s oversized erection and his resulting associations with fertility. Indeed, Weisshaar’s reference to Priapus was not without precedent: the flower bed at the foot of the flora temple in the Wörlitzer Gartenreich was planted in the form of a phallus.⁹² Even the opencast mining landscape is open to sexual associations: Smithson identified a sexual aspect in the act of strip mining, both in the valences of the word “stripping”

⁹² See: Niedermeier, Michael. *Erotik in der Gartenkunst. Eine Kulturgeschichte der Liebesgärten*. Leipzig: Edition Leipzig, 1995, pp. 175. From the entrance and from the upper balcony of the temple, this flower-phallus points straight down a visual axis to the Gothia House, which Niedermeier reads as a reminder of medieval ideals of courtly love.

and in the physical violation of the earth.⁹³

The museum itself contained six locker doors that Weisshaar had salvaged from a scrap pile; Weisshaar hung these doors so that visitors could access both sides, and view the GDR-era pinups that miners had plastered on the doors' inside surfaces. On the walls of the museum, Weisshaar displayed his photography of opencast lignite mines and towns demolished for mining.⁹⁴ During the walking tours, Weisshaar turned the museum into a display space for exhibits of natural specimens that visitors found throughout the mine.

With a collection exercise, visitors learned to observe the environment within the mine, and in so doing, internalize the idea that it was indeed an aesthetic landscape rather than one merely exhausted by industry. The museum's most engaging display was the naturalia exhibit that Weisshaar would curate anew for each tour, by sorting samples of earth, coal, and vegetation collected by the walk participants. Each visitor was given a plastic bag with the instruction to collect "a piece of this landscape, or something that documents or reflects this landscape" for the museum.⁹⁵

⁹³ Smithson, pp. 307.

⁹⁴ These included photos from the active opencast mine Zwenkau, south of Leipzig, and from the towns Horno and Heuersdorf, which were to be demolished for mine expansion. Archiv Weisshaar.

⁹⁵ Hoppenhaus and Müller.



Figure 2.7: Weisshaar arranging samples collected by visitors in the “Exile of Priapus.” Hoppenhaus, Kerstin and Edda Müller. *Die Entdeckung der Zwischenzeit. Spaziergangsforscher im Restloch*. Dessau, 2000. VHS.

A Natural History Museum of Industry

In the analysis of Weisshaar’s natural history exhibit, it is difficult to separate the themes that I have identified. The activity in which the visitors collected samples of the natural features of the mine is on one hand an exercise in museal practices of collecting and categorizing. On the other hand, it is also an embodied experience of walking through the landscape, observing it and recognizing it as such, and manually taking representative samples from it. Both the museal and the experiential aspects of this activity involved the mental engagement, sensory perception, and wonder of the visitor, whose participation created their own experience of the post-industrial landscape. Weisshaar’s subsequent rearrangement and display of the collected samples, which

the visitors would see after Weisshaar completed it, once again reinforced the concept of industrial nature through a more organized form of museal spectatorship.

By having visitors collect and curate their own exhibit of natural specimens from the post-industrial landscape, Weisshaar personally guided participants through the kind of aesthetic learning experience that Ganser and Dettmar thought was necessary to appreciate *Industrienatur*. As one participant wrote, the museum “Exil des Priapos” became a “school of looking”:

Bertram Weisshaars Exil ist eine Schule des Schauens, ein Versuch, auf die Besonderheiten des Ortes einzugehen, um mit kleinen Eingriffen die Wachstumsbedingungen für Pflanzen auszuloten. Beobachten, pflanzen, begutachten: Nicht das Ergebnis ist hier entscheidend, sondern das Lernen und Verstehen, wie sich Pflanzen entwickeln und in welcher Art und Weise Landschaften zu erfassen sind. Formen, die Regen und Wind, Hitze und Kälte gleichermaßen ausgeliefert sind, faszinieren gerade durch ihre wechselnden Erscheinungsbilder, sie machen erst begreiflich, daß die Zeit den Raum belebt und prägen nachhaltiger als starre Kunstobjekte das Beziehungssystem zwischen Zeit und Erlebnisdichte.⁹⁶

This passage not only reveals the connection between the musealization of the opencast mining landscape and visual education, but also emphasizes the importance of physical presence within the landscape. While the exercise with collecting samples teaches the visitor to observe the ecosystem, and thereby to recognize the biodiversity that will be eradicated in the flooding, the entire walk itself exposes the visitor to changes in weather, temperature, and surroundings, thereby introducing the visitor to a temporal and embodied way of experiencing the mine that cannot be replicated in an exhibit of “rigid objets d’art.”

The Exile of Priapus combines temporal references to towns like Gremmin that were threatened or demolished by local mining, to the recently passed workplace of the mine itself, to the present environment within the mine, and to the future of the site as a lake around Ferropolis. That Weisshaar brought these timelines together in a museum is hardly surprising, considering the conventional function of a museum. His choice makes somewhat less sense in the contexts of the IGR and IBA Emscher Park, which were both critical of “musealization” unto itself, as well

⁹⁶ Ullmann, pp. 20-21.

as in consideration of Weisshaar's use of Smithson, who was critical of the institution of the art museum. Both of the statements above are complicated by the museum's transitory status, which brings into question the tenuous quality of the connections drawn among the museum's multiple temporal frames.

The combination of different types of museum exhibits within the Exile of Priapus reflects its multiplicity of temporal frames. The photos and histories of lost towns evokes the content of a "Heimatmuseum," while the everyday objects from the work environments of the miners (locker doors with pinups, the building itself) are typical of museums of industry (of a certain era). Whereas both of these displays evoked the past in a fairly typical way (for a museum), the natural history exhibit put the past, present, and future into tension. I continue to describe the exhibit as one of natural history, which implies a borrowed form from the past; the collection itself, however, consisted of fresh samples from the walks; and one of Weisshaar's main intents behind the display was to show the visitors the biodiversity that would disappear with the coming flooding, just as Gremmin had disappeared, and the labor of mining in turn.

Over the two-year period of its existence, Weisshaar's museum deteriorated by weathering. In a report, he described the damaged roof and the faded pinups, which would need to be repaired and replaced, respectively, in order to convert the museum into a permanent fixture in Ferropolis. Like the walks and gardens, the museum was transitory, and its physical decay marked the same forces of entropy that Weisshaar attempted to illustrate in the homage to Smithson. Even the building itself – a lightweight shed on rails that could be moved along the path of excavation – was never intended to last, much less to represent any kind of permanence through its design or materials.

Conclusion

At Golpa North, Weisshaar and his colleagues offered visitors a guided experience of the post-industrial landscape. One of this project's main goals was to change visitors' perception of lignite strip mines, in order to cultivate appreciation for the unique terrain, as well as the flora and fauna that thrived there. In the pursuit of this end, the "Strollologists" created a series of performances, activities, and artistic installations to punctuate their tours of the mine. Thus, the project employed an aesthetic pedagogy of the post-industrial landscape, much in the manner that Ganser and Dettmar thought would be necessary to teach visitors to appreciate *Industrienatur*. Whereas the tours could have been conducted with a more scientific focus, and could have perhaps consisted of a series of short lectures, the elements of art, humor, and play contributed to the development of positive emotional associations with the landscape.

CHAPTER III

Feuer, Wasser, Erde, Luft: Elements of Transformation in the Postindustrial Landscape

Designs of Wolfgang Christ and Herman Prigann



Figure 3.1: Herman Prigann silhouetted by a bonfire. Schierz, Heinrich. *Kunstszene Tagebau: Dokumentation eines ungewöhnlichen Kunstereignisses*. Heidelberg: Edition Braus, 1992.

Tuesday, May 25, 1999 – Gelsenkirchen: Flames lick the sky as Herman Prigann, a land artist from nearby Recklinghausen, ignites a circle of bonfires atop a conical mountain of gravel. These fires celebrate the inauguration of Prigann's plan to turn the site of the former Rheinelbe

coal mine into an industrial forest of spontaneous vegetation and sculptures.⁹⁷ Trails lead through the forest to the base of the mountain – also part of Prigann’s design – where three paths spiral upward to the summit. There, Prigann has erected a henge of concrete slabs that he calls a “stairway to heaven.” Deep below, a persistent inferno smolders with sufficient heat to melt aluminum. The mountain serves not only as a recreational destination, but also as a ground seal to smother the perpetual spontaneous combustion of century-old western German coal mining waste. From the summit, the fire and its fumes are hardly detectable. Instead, visitors see a panorama of the surrounding landscape, including the distant silhouette of a tetrahedron pointing skyward atop another artificial mountain on the horizon. This remote structure is the work of Wolfgang Christ, a German architect who crossed paths with Prigann at another former mine, elsewhere in Germany.

Friday, May 7, 1999 – Bitterfeld: A diluvial torrent rushes from the Mulde River through open floodgates into a vast, sandy pit left behind by East German strip mining. As the waters rise, they complete Christ’s plans for a floating lookout tower, one that will be accessible to visitors via a long bridge that likewise rests upon the future lake’s surface. At the same time, the flooding conceals not only the visible evidence of strip mining’s environmental impact, but also most remaining traces of one of Prigann’s artworks. Here on the floor of the strip mine, Prigann had traced in earthworks an evocation of the original path of the Mulde River, which had been rerouted to make way for the expansion of the mine, and whose waters were now transforming the mine into Lake Goitzsche.⁹⁸

⁹⁷ Prigann, Herman, Renate Späth, Peter Köddermann, and Dieter Ronte. *Rheinelle, Art in Nature: Der Skulpturenpark von Herman Prigann*. Essen: Klartext, 2010, pp. 45-46.

⁹⁸ Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH (LMBV). *Sanierungsgebiet Goitzsche. Ein Referenzstandort für die EXPO 2000*. Bitterfeld: LMBV, Presse- und Öffentlichkeitsarbeit, 2000.

The Case Studies

The four land art and landscape architecture projects that I study in this chapter – Christ’s *Tetraeder/Haldenereignis Emscherblick* (“Tetrahedron/Mining Tip Experience Emscher View,” 1995) atop the Beckstraße mining tip in Bottrop, and *Pegelturm mit Seebrücke* (“Water Gauge Tower with Lake Bridge,” 1999-2000) in Lake Goitzsche, as well as Prigann’s *Industriewald/Skulpturenwald Rheinelbe und Spiralberg mit Himmelstreppe* (“Industrial Forest/Sculpture Forest Rheinelbe and Spiral Mountain with Stairway to Heaven,” 1997-2000) in Gelsenkirchen, and *Der verschwundene Fluss/Die Erdwelle* (“The Vanished River/The Earth Wave,” 1998-1999) in the Goitzsche strip mine near Bitterfeld – were commissioned in the 1990s under the International Building Exhibition Emscher Park (IBA Emscher Park, 1989-1999) in the western Ruhr metropolitan area, and the EXPO 2000 Correspondence Region Saxony-Anhalt (EXPO 2000) in the eastern Dessau-Bitterfeld-Wittenberg area.⁹⁹

Christ creates architectural installations that punctuate that landscape, both as widely-visible landmarks, and as destinations where the visitor can survey the landscape from an elevated position with a 360° range of vision. The simplicity of the forms that Christ selects for his lookout towers reflect the elemental forces that shape the surrounding landscapes. As such, these structures both formally symbolize the catalysts of post-industrial landscape transformation, and physically place the visitor in a position to visually recognize the full extent of that transformation.

In contrast to Christ’s points of interest, Prigann’s projects invite the visitor to experience the post-industrial landscape along paths that branch across its surface. In his land art and his

⁹⁹ The latter program was the result of collaboration between leaders of the IBA Emscher Park and of the reopened Bauhaus Dessau’s Industrial Garden Realm (IGR, 1989-1999), which arose independently of the IBA Emscher Park, but shared the aim of achieving economic, environmental, social, and cultural improvement of the surrounding region via historic preservation, creative reuse, and landscape design.

theories of “ecological aesthetics,” Prigann pairs human intervention with spontaneous growth to create spaces in which the distinction between what is “natural” and what is “artificial” comes under scrutiny. In the sculptures and earthworks that he places in these spaces, he combines the material remains of industry and the forces of ruderal vegetation to reflect both the site’s specific history and to highlight its transformation into a unique form of post-industrial landscape.¹⁰⁰

Above, I have listed my case studies paired according to creator, in order to draw attention to the overarching themes that will be central to my discussion of each individual’s works. However, the sequence in which I will examine them pairs the projects according to geographic region. The regional specificity of coal geology and the forms of mining necessitated by that geology are decisive factors that shape the two mining landscapes, as well as the forms of remediation, art, and architecture that are appropriate to those landscapes. The sequence in which I discuss my examples pairs them according to regional programs: the projects of the IBA Emscher Park were part of a *Landmarkenkunst* (“Landmark Art”) program, while the projects of the EXPO 2000 were part of the *Kulturlandschaft Goitzsche* and *Wasserlandschaft Goitzsche* programs (“Cultural Landscape” and “Water Landscape” Goitzsche). The *Landmarkenkunst* program produced a network of artistic installations atop the Ruhr region’s mountainous mining heaps that would function not only as panoramic viewpoints from which to look across the surrounding landscape, but also as landmarks (hence the project name) to be visual reference points throughout the region. The *Tetraeder*, for example, is visible from the *Spiralberg*, although the latter is more difficult to spot from the much higher vantage points of the former. On the other side of former border, the *Kulturlandschaft Goitzsche* program was touted as the

¹⁰⁰ “The term *ruderal* comes from *rudus*, the Latin term for rubble. A common term in urban ecology, it refers to communities that emerge spontaneously in disturbed environments usually considered hostile to life: the cracks of sidewalks, the spaces alongside train tracks and roads, industrial sites, waste disposal areas, or rubble fields.” Stoetzer, Bettina. “Ruderal Ecologies: Rethinking Nature, Migration, and the Urban Landscape in Berlin.” *Cultural Anthropology*, vol. 33, no. 2, Washington, D.C.: American Anthropological Association, 2018, pp. 295–323.

“world’s largest landscape art project,” while the *Wasserlandschaft* program aimed at the generation of recreational and natural areas where lignite strip mining had taken place.

Because Christ and Prigann engage directly with the surrounding terrain and local histories of the sites of their interventions, this regional factor has important impacts on the final shape of their works. In this manner, I begin with Christ’s *Tetraeder* and Prigann’s *Industriewald/Spiralberg* in the Ruhr, before proceeding to Christ’s *Pegelturm* and Prigann’s *Verschwundene Fluss* in the Goitzsche. I will proceed by region, beginning with the Ruhr and then moving to Lake Goitzsche. Before discussing the individual projects in each region, I will introduce the geological and industrial formation of the post-industrial landscapes into which the projects make an intervention. For the sake of consistency, my discussions of Christ’s projects will precede those of Prigann’s within each regional section of the chapter. In the Ruhr, this sequence means that I will be discussing the projects according to the chronological order in which they were created. At Lake Goitzsche, however, I will discuss the projects in a spatial order, according to the sequence in which a visitor would encounter them if traveling from Bitterfeld around the banks of Lake Goitzsche. Due to the smaller scale and lesser physical presence of the sites at Lake Goitzsche, and because of the thematic overlaps that come with each creators’ works, my discussions of the EXPO 2000 projects will be shorter than that of the IBA Emscher Park projects.

My analysis of each site will include a brief history of its creation, a description of a visitor’s experience, and a discussion of the aesthetic effects and theoretical implications of that site. Third-party accounts, statements from the creators, and my own experiences will inform my discussions.¹⁰¹ I will also pay attention to the signage present at each site, as the signs installed by the IBA Emscher Park and the EXPO 2000 are often the only sources of information on-site

¹⁰¹ See the first chapter of this dissertation for a more thorough discussion about my methodology.

for visitors who may wish to know more about the histories of the post-industrial landscape or the art and architecture that have been created there.¹⁰²

First, however, I will set up the theoretical framework for my analysis by turning to Gernot and Hartmut Böhme's contemporary aesthetic theories of nature and their cultural history of the four elements fire, water, earth, and air. The most direct connections between the Böhmes' philosophy and the projects that I examine in this chapter are biographical and thematic. Christ studied philosophy under Gernot Böhme from 1980 to 1983,¹⁰³ and although Prigann did not engage in direct dialogue with the Böhmes, his ecological aesthetics are informed by the Böhmes' aesthetics of nature. I examine the affinities between the theoretical works of the Böhmes and the practical works of Christ and Prigann, in order to shed light on how the four post-industrial landscape projects engage the forces of nature to reshape their surrounding environments and the visitor's perceptions of those environments. What arises is an understanding of the post-industrial landscape aesthetic as one that renders processes of transformation perceptible to the visitor through immediate, sensory, physical, embodied experience.

Ecological Aesthetics of Nature and the Elements

The Böhmes undertook the project of a new "ökologische Naturästhetik" in response to environmental problems that had resulted, in their view, from an alienated relationship between

¹⁰² In a sense, these signs serve the same function as museum labels, but in outdoors spaces where the landscape, art, and architecture are being exhibited.

¹⁰³ Christ attended Böhme's lectures as an architecture student for a couple years before beginning to take Böhme's seminars in 1980. As he recalls, he sought Böhme's courses in order to pursue lines of inquiry that his architecture education couldn't answer, including questions about the meaning of architecture, about how people experience space, and about how to design spaces to improve the quality of peoples' experience. He says that at the time, he subscribed to a architectural postmodernist desire to learn from the mistakes of mid-century modern architecture and urban planning. Böhme's emphasis on the human body, on its physical, embodied, unmediated contact with the surrounding space complemented what Christ found to be absent from the architecture instruction that he received. Christ, Wolfgang. Personal Interview. 4 June 2018.

humans and nature. Part of the problem, they figured, was that the separation of human and natural constituted a false binary that enabled the kind of instrumental thinking that led to industrialization and the subsequent destruction of nature, not only in the forms of dead plants and animals in devastated and contaminated landscapes, but also in the forms of labor exploitation and the resulting diseases and deaths of humans. Hartmut Böhme's *Natur und Subjekt* ("Nature and Subject," 1988), as well as Gernot Böhme's *Für eine ökologische Naturästhetik* ("For an Ecological Nature Aesthetic," 1989) and *Atmosphäre* ("Atmospheres," 1995). Gernot Böhme distinguishes this aesthetics from the traditional field that stretches from Kant to Adorno by stating that feeling (*das Empfinden*) rather than judgement (*das Urteilen/Beurteilen*), such as the critique of art, is the topic of inquiry. In this vein, Böhme returns to "aesthesis" to establish his ecological aesthetics of nature (ökologische Naturästhetik), and Böhme defines the primary object (*Gegenstand*) of perception in this phenomenological aesthetics to be atmospheres.

Through his art and writings, Prigann developed a concept of "ökologische Ästhetik" that exhibited influences from Gernot Böhme's "ökologische Naturästhetik." Indeed, Prigann cited the eponymous aesthetics of Gernot Böhme's *Für eine ökologische Naturästhetik* in a paper that he wrote while working at the Bauhaus in 1996 in the context of the Industrial Garden Realm and the EXPO 2000,¹⁰⁴ and mentioned it briefly in a conversation with Jacques Leenhardt, printed under the title "Ökologische Ästhetik oder ästhetische Ökologie."¹⁰⁵ Traces of Böhme's work can be seen in Prigann's writings on "ökologische Ästhetik," particularly in respect to the distinction between aesthetics as a question of perception rather than judgement, as well as in the use of terms such as "atmospheric." It is important to note, however, that Prigann's engagement

¹⁰⁴ Prigann, Herman. "Überlegungen zu 'Art in Nature' – Auf der Suche nach einem anderen Natur- und Kunstverständnis." Nachlass Herman Prigann. Rheinisches Archiv für Künstlernachlässe.

¹⁰⁵ Prigann, Strelow, and David, pp. 110-115.

with the relationship between art and ecology predated the publication of Böhme's book on the ecological aesthetics of nature. Thus, Prigann's aesthetics were certainly informed by Böhme's, but Prigann would have already been in the process of articulating this concept by the time he could have encountered Böhme's works. This can be seen in Prigann's terms "Skulpturale Orte" and "Metamorphose Objekte," which he used to describe his works through the 1980s and 1990s.¹⁰⁶

In 1996, the Böhmes' turned the focus of their larger project of developing a new environmental aesthetics of nature toward a cultural history of the elements of fire, water, earth, and air. They ground the rationale for their study of these four elements in the need to respond to environmental problems, and suggest that the exclusion of these elements from the natural sciences around 1800 was part of the problem.¹⁰⁷ They recognize a return of all classical elements but fire to scientific validity in the field of ecology, in the sense that water systems, the atmosphere, and the soil have become subjects of physical, chemical, and biological analyses concerning how they support life.¹⁰⁸ Gernot Böhme formulates the jump from the environmental question to aesthetics and phenomenology of nature as a matter of complementing the work of the natural sciences:

Diese Umweltproblematik wird normalerweise naturwissenschaftlich behandelt. Da geht es um Grenzwerte, da geht es um Schadstoffe in den Lebensmedien Wasser, Luft und Erde. Die Frage wird physikalisch-chemisch gestellt. Aber man kann und man muß sie auch ästhetisch stellen, denn für die Frage, wie wir in der Umwelt leben, ist letztlich entscheidend, wie wir uns befinden, wie wir uns fühlen,

¹⁰⁶ See Hilmar, Jiri, Hermann J. Kassel, Christiane Möbius, Fabrizio Plessi, and Herman Prigann. *Naturraum - Kunstraum 1: Bildhauer-Symposium anlässlich der Bundesgartenschau in Dortmund, April bis Oktober 1991: Dokumentation der Projektenwürfe und der Ausstellung im Museum am Ostwall Dortmund*. Dortmund: Museum am Ostwall Dortmund, 1991.

¹⁰⁷ Böhme, Gernot and Hartmut Böhme. *Feuer Wasser Erde Luft. Eine Kulturgeschichte der Elemente*. C. H. Beck: München, 1996, pp. 19.

¹⁰⁸ Böhme and Böhme, pp. 305-307. They do not consider the field of fire ecology, but suggest that energy and information technologies can be understood as contemporary analogues to fire. The reason for their omission of this may be grounded in their understanding, expressed elsewhere, of the other elements as ingredients of the metabolic and material aspects of life. To the extent that no organism breathes, drinks, eats, or excretes fire, it is also not a part of the environment that can be contaminated by humans, and therefore less of a concern to the Böhmes' environmental aesthetics.

also wie wir unsere Umwelt sinnlich erfahren.¹⁰⁹

Here, the relationship between aesthetics and the question of “how we sensorially experience our environment” is should be explained: the Böhmes refer back to aesthesis as sensory perceptions and phenomenology.¹¹⁰ Furthermore, the Böhmes are indebted to classical natural philosophy in the tradition of Aristotle, which establishes phenomenological aspects of the four elements.

According to this tradition, each element is determined by immediate (as in unmediated) sensory perception according to how a phenomenon feels to the touch, whether hot or cold, wet or dry.¹¹¹

Within the broader context of the Böhmes’ ecological aesthetics of nature, this return to classical theories of elements was ultimately part of an attempt to reconcile the alienated, exploitative relationship between humanity and nature.¹¹²

As part of the new ecological aesthetics of nature, the Böhmes open the field of inquiry not only to nature, but also to the arts, especially the applied arts. This is in part a turn away from the philosophical tradition of aesthetics leading from Kant to critical theory of the Frankfurt School, which they characterize as primarily concerned with intellectual judgment and fine arts, the “true,” “high,” or “autonomous” arts.¹¹³ Gernot Böhme states that the critical potential of this aesthetics is its ability to address the power associated with aesthetic labor.¹¹⁴ He notes

architects, designers, and landscape gardeners among the types of aesthetic laborers whose

¹⁰⁹ Böhme, Gernot. *Atmosphäre. Essays zur neuen Ästhetik*. Frankfurt am Main: Suhrkamp, 1995, pp. 14-15.

¹¹⁰ Böhme 1995, pp. 10. Because of the Böhmes’ emphasis on sensory perception and aesthetics as “Aisthesis,” and differentiate their project from the phenomenological tradition of Husserl, Sartre, and Merleau-Ponty. Gernot Böhme identifies Aristotle, Goethe, and Alexander von Humboldt as other major practitioners of the kind of aesthetics and phenomenology of nature that the Böhmes aim to develop. See: Böhme, Gernot and Gregor Schiemann. *Phänomenologie der Natur*. Frankfurt am Main: Suhrkamp, 1997, pp. 11-14. See also: Böhme 1995, pp. 180-182

¹¹¹ Böhme 1997, pp. 14-18. See also: Böhme and Böhme, pp. 114-117.

¹¹² Ibid., pp. 311.

¹¹³ Böhme 1995, pp. 7, 15-16, 39-41.

¹¹⁴ “Diese Macht bedient sich weder physischer Gewalt noch befehlender Rede. Sie greift bei der Befindlichkeit des Menschen an, sie wirkt aufs Gemüt, sie manipuliert die Stimmung, sie evoziert die Emotionen. Diese Macht tritt nicht als solche auf, sie Greift an beim Unbewußten. Obgleich sie im Bereich des Sinnlichen operiert, ist sie doch unsichtbarer und schwerer faßbarer als jede andere Gewalt. Die Politik bedient sich ihrer ebenso wie die Wirtschaft, sie wurde traditionell schon immer von religiösen Gemeinschaften eingesetzt und hat heute ihr unbegrenztes Feld, wo immer die Kulturindustrie Leben inszeniert und Erleben präformiert.” Ibid., pp. 39.

professions entail practical expertise in creating and shaping the aesthetic perceptions.¹¹⁵ I argue that the post-industrial landscape design that I study in this dissertation must be understood in this context. The works of Christ and Prigann are fundamentally implicated in the political and economic interests that made the IBA Emscher Park and the EXPO 2000 Korrespondenzregion Sachsen-Anhalt possible: the need to improve the ecology, economy, society, and culture of deindustrialized regions. These artistic interventions are by no means autonomous, but are instead instrumental in their design. Christ, as architect and urban planner, considered structural change when designing his *Tetraeder* and *Pegelturm*; Prigann, as land artist, created the *Skulpturenwald und Spiralberg mit Himmelsleiter* and *Der verschwundene Fluss* with forms of environmental change in mind. Together, these projects were part of the post-industrial landscape transformations that I study throughout this dissertation. As I discuss these projects below, I will also investigate the ways in which they mobilize different associations with the elements of air, earth, fire, and water in the post-industrial landscape.

The Ruhr

The process of extracting coal from deep within the earth generates a large volume of loose stone with no caloric value, and all of this material must go somewhere. At first, when mining was still mostly a manual affair, coal and waste stone or “spoil” would be separated underground; the coal would be brought to the surface, and the spoil would be filled in exhausted sections of the mine. While this technique left no visible accumulation of mining waste on the surface, it also required energy and time. As demand for coal increased and technology

¹¹⁵ Böhme 1995, pp. 17-18, 34-37, 97-98. Furthermore, Böhme recognizes contemporary aesthetic work to be part of an “aesthetic economy,” one that is characteristic of a developed stage of capitalism in which, because the fundamental “Bedürfnisse” of society have been satisfied, economic growth can only continue in the form of aesthetic production that both caters to and intensifies “Begehren.”

improved, it became more effective for mines to deposit their waste in piles on the surface. As a result, the mountainous post-mining landscape of the Ruhr Valley has been formed by the following three strategies of mining waste management.

In the Ruhr, mechanical extraction was predominant by the 1920s, and spoil that had been brought to the surface was deposited near the mine shaft in steep, loosely-piled conical heaps (Spitzkegel), or “tips.” The combination of loose packing of, and the incomplete coal removal from the stone discarded during the mining process led to the problem of burning mining tips. The center of a mining tip is under sufficient pressure from the weight of the stone above, that any penetration of oxygen from the atmosphere could induce spontaneous combustion. This was particularly common among first-generation heaps, which were created before developments in coal washing and waste spreading technologies. Once started, such an underground fire is nearly impossible to extinguish. The internal temperatures of burning mining tips often fall around 500° C, but can reach as high as 800° C, as in the case of the heap at Rheinelbe.¹¹⁶

This practice of dumping spoil was replaced in the late 1960s by the creation of so-called “terraced table” tips (“Tafelberge”). This second generation of heaps features receding tiers with trapezoidal cross-sections, which allowed spoil to be packed higher, more densely, and with greater stability. The shift from loose, conical tips to terraced table tips reflected the increasing volumes of mining, the improved efficiency of coal washing (the process of separating spoil from coal), and the recognition that unstable spoil piling could pose a risk to industrial operations and public safety.

In the 1980s, the decline of coal, increasing concerns about the environment, and public

¹¹⁶ Berke, Wolfgang. *Über alle Berge: Haldenführer Ruhrgebiet 2.0*. Essen: Klartext, 2017, pp. 84-85. Other mining tips with “Warmstellen” include Halde Großes Holz in Bergkamen, Halde Runenberg in Gelsenkirchen, and Halde Graf Moltke in Gladbeck.

complaints about eyesores led to the development of a third generation of mining tips. For this final version of waste stone dumping, care is taken to create mining tips in more organic, irregular forms that are intended to emulate the contours of “natural” landscapes once overgrown.¹¹⁷ This third-generation mining tip design, called “Landschaftsbauwerk”, reveals three points about the state of mining remediation prior to the programs that I examine in this dissertation. First, this strategy works by obscuring the evidence of mining activity, in such a way that the resulting landscape could be mistaken for an untouched, “natural” area. We have seen the same logic in action in the remediation-by-flooding of the Golpa North (in the previous chapter) and Goitzsche (in this chapter) strip mines. Second, these remediation efforts aimed to produce landscapes that had value not only for environmental protection reasons, but for recreational uses as well. Third, and in contrast to the remediation of strip mines, these third-generation heaps are designed to achieve the appearance of wilderness through the application of live vegetation. In this sense, the conflation of natural and artificial is inherent to the *Landschaftsbauwerk*. As we shall see below, Prigann’s *Skulpturenwald Rheinelbe* and his ecological aesthetics accentuate this collaborative conception of the relationship between humans and nature.

The two large-scale post-industrial revitalization programs that I study throughout this dissertation – the IBA Emscher Park in the Ruhr and the IGR/EXPO 2000 Korrespondenzregion Sachsen-Anhalt – were among the first to involve artists and architects in the remediation process. Whereas respect for aesthetic and ecological concerns was already evident in the development of *Landschaftsbauwerk* mining tips (this was less the case in the East, but I shall return to that later), neither artistic interventions, nor historic markers, nor even public

¹¹⁷ Auer, Sabine, and Sigrid Godau. *Unter freiem Himmel. Emscher Landschaftspark*. Basel: Birkhäuser, 2010, pp. 128-131. See also: Berke, pp. 55-57.

recreational opportunities factored into plans for the future of industrially “wasted” landscapes in Germany prior to 1989. In this sense, Christ’s and Prigann’s projects in the Ruhr can be seen as part of a fourth generation of mining tip: one in which art and culture join natural processes as agents of remediation.

The “Mining Tip Event Emscher View” and the Tetrahedron

Among the highest of the Ruhr mining tips is Halde Beckstraße in Bottrop. Between 1963 and 1980 waste stone from the mine Zeche Prosper II was piled onto the mine tip at Beckstraße/Batenbrock. Today, the plateau at the top of Halde Beckstraße stands seventy-eight meters above the surrounding elevation.¹¹⁸ The pile has been recultivated: a layer of soil covers the stone heap, a layer of grass covers the soil. In 1990, a project entitled *Haldenereignis Emscherblick* was taken up by the IBA Emscher Park. After a design seminar and an artists’ competition, Wolfgang Christ’s and Klaus Bollinger’s design, along with Jürgen LIT Fischer’s light installation *Lichtereignis Fraktal* (“Light Event Fractal”), was selected to crown the mine tip.¹¹⁹ The final installation, known as the *Tetraeder*, was opened in 1995.¹²⁰ A web of paths cover this artificial mountain, such that visitors may reach the summit as directly or as leisurely as they desire.

Of all the landmarks and panoramas that were created through the IBA Emscher Park, the *Haldenereignis Emscherblick* remains the most-visited mining tip in the region.¹²¹ Altogether, the *Tetraeder* stands nearly sixty meters high, and contains three suspended viewing platforms at

¹¹⁸ Berke, pp. 43.

¹¹⁹ Taube, Marion. “Über die Wahrnehmung von Schönheit und die Entstehung von Kunst im Emschertal.” *Kunst Setzt Zeichen: Landmarken-Kunst*. Pachnicke, Peter, editor. Oberhausen: Ludwig Galerie Schloss Oberhausen, 1999, pp. 21. The 1990 summer seminar of the Foundation of German Architects (Stiftung Deutscher Architekten) took place in Bottrop

¹²⁰ Technische Universität Dortmund, editor. *Internationale Bauausstellung Emscher Park. Die Projekte 10 Jahre danach*. Klartext Verlag, Essen, 2010, pp. 270.

¹²¹ Berke 2017, pp. 119-125.

various heights. These platforms and the connecting staircases are made of steel mesh and sway lightly in the wind; the final platform is tilted at a slight angle. In the immediate vicinity, both the indoors Alpine ski center atop the neighboring Halde Prosperstraße and the still-active coking plant Prosper are prominently visible. These and other, more distant landmarks are identified in a series of information panels that line the top of the mine tip.

The *Tetraeder* is readily visible and recognizable from the tops of towers, headframes, and spoil tips throughout the region. Its symmetry guarantees a triangular silhouette regardless of the visitor's relative position from afar.¹²² On most days, flames from the nearby Prosper coking plant further highlight the location. At night, Jürgen LIT Fischer's *Lichtereignis Fraktal* zigzags along the top beams of the *Tetraeder* without crossing or doubling back upon its own path. The "fractal" part of the title refers the fact that the path traces a "fractal curve," which in turn reflects the fractal geometry of the *Tetraeder* itself.¹²³ The addition of light art to the *Tetraeder* is not unique, however. As one of the IBA Emscher Park's landmark art projects, the Halde Rungenberg in Gelsenkirchen received two spotlights that draw an X in the night sky, and in 2005 a thirty-meter replica of a miner's lamp was constructed atop Halde Rheinpreußen in Moers. Colorful illumination of repurposed industrial complexes is also common, prominent examples being Jonathan Park's installation at the Landschaftspark Duisburg-Nord and similar lights at the UNESCO World Heritage Site Völklinger Hütte near Saarbrücken.

¹²² The only other "Landmarkenkunst" that stands out similarly at such long range are the semi-circular arches of the "Horizont-Observatorium" atop Halde Hoheward in Herten, far to the east of the *Tetraeder*.

¹²³ Ganser was unconvinced that visitors would intuit the mathematical concepts behind Fischer's design for the "fractal" light installation, and even wrote to him, "Nun kommt es darauf an, dass außer Ihnen, noch einer das versteht." Ganser, Karl. Letter to Jürgen LIT Fischer. 4 September 1996. Internationale Bauausstellung Emscher Park Papers, 1177A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Bochum. To this day, no signage explains the mathematical significance of the "Lichtereignis Fraktal."



Figure 3.2: The cultivated Halde Beckstraße behind Prosper Coking Plant, with *Haldenereignis Emscherblick* and *Tetraeder*, as seen from *Zeche Zollverein* in Essen. Photo: Author, 2018.

At the beginning of the 1980s, Christ had planned to earn a Ph.D. in architecture with a dissertation on the medialization of cities, entitled *Stadt als Programm* (“City as Program”). He proposed the thesis that the increasing consumption of television¹²⁴ would in turn increase the extent to which people perceive their environment (Umwelt) primarily through screens. This project never took place: as Christ recalls, the institutions and foundations to which he applied for funding rejected his proposal, on the grounds that media would never play such an important role in people’s perception of their environments. Instead of dissertation, then, Christ put his interest into praxis as an architect and urban planner. From 1983 to 1988, Christ was a research assistant at the Technical College Darmstadt, in a group of specialists on the theme “City” under Professor Thomas Sieverts, who became the urban planning director of the IBA Emscher Park in 1989. From 1988 to 1989, Christ was working as a freelancer for the IBA Emscher Park, before Ganser recruited him for the *Haldenereignis Emscherblick* project in 1990.

In retrospect, Christ notes that he intended the lookout tower to be a complementary

¹²⁴ Christ was particularly interested in cable television programs that focused on local people, places, and topics. At the time, Dortmund was one the subject of one of four pilot projects for local television. Through preliminary research, Christ learned that most cable television viewers would primarily consume local features, “egal wie banal,” rather than other, potentially more attractive programming. Christ, Wolfgang. Personal Interview. 4 June 2018.

medium to the kind of medialization that he had intended to study in his dissertation. Christ describes conventional towers, in which the visitor is separated from their surroundings by walls between entering the enclosed tower and emerging at its peak, as cameras obscura, and relates the isolating aesthetics of such towers (with blackout spaces illuminated only by aperture-like windows) to the effects of screen media. By contrast, Christ wanted to create an analog experience: one that was physically challenging, even terrifying (Christ, too, suffered from a fear of heights), but also one that would bring people away from their screens and into an unmediated engagement with their environment. At the same time, Christ wished to avoid the contemporary trends of architectural deconstructionism, so as not to project any instability that might resonate with public feelings of uncertainty concerning economic structural change in the Ruhr. To this end, Christ chose to design a tower in the form of a tetrahedron, the most structurally stable of the Platonic solids.



Figure 3.3: Model for the *Haldenereignis Emscherblick* including wind turbines and inclined elevator. Internationale Bauausstellung Emscher Park Papers, 378B. Archiv für Soziale Bewegungen. Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

In the first draft of the design for the *Haldenereignis Emscherblick*, Christ and a team of collaborators conceived of the site as a high-tech, autonomously-powered multimedia exhibition space.¹²⁵ In addition to Christ's tetrahedral lookout tower, the design included: A snack bar, a weather survey station for climate research; historical models of the region before 1800, in 1900, 1960, and in the post-industrial era, to be suspended within the tetrahedron; functional models of nearby industries; audiovisual touchscreens with access to thousand of photos, newspapers, film clips, and other historic and contemporary documents; an inclined elevator to bring visitors back and forth from the foot of the mining tip to its summit; and solar panels, wind turbines, and

¹²⁵ Christ, Wolfgang, Christian Maiwurm, Susanne Plum, and Antonius Witte. "Haldenereignis Emscherblick. Zusammenfassende Überlegungen der Arbeitsgruppe." 15 September 1990. Internationale Bauausstellung Emscher Park Papers, 378A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Bochum. Except for Maiwurm, who had a marginal role, these architects were not involved in the design of the Haldenereignis Emscherblick after 1992.

possibly even hydroelectric generators with which to power the entire complex. Financial limitations repeatedly forced Christ to narrow his vision of the site to a solitary tower, accompanied only by the no-tech information panels and telescopes around the edges of the plateau. By 1992, all exhibition functions were dropped from the design, although plans were still under consideration to install an elevator within the *Tetraeder*, and to line the plateau with solar panels and trees.¹²⁶ Subsequently, the emphasis of Christ's rationales for the *Haldenereignis Emscherblick* shifted from the benefits of a multimedia exhibition, to those of having a counterpoint to the effects of "new media":

Sich ein 'Bild zu machen' reduziert sich im Zeitalter der Neuen Medien im Idealfall auf einen sanften Knopfdruck der Fernbedienung. Wissen, Erfahrung, 'Weltkenntnis' wird damit erstmals von der Fort-Bewegung des eigenen Körpers abgetrennt ('Reisen bildet...') Das Haldenereignis setzt also im Zeitalter technisch immer komfortabler werdender Informationsmedien einen Kontrapunkt. Das Filmmotiv wird umgekehrt: Bilder beginnen erst durch die eigene Bewegung zu 'laufen.'¹²⁷

It is worth noting that Christ does not turn to earlier, pre-industrial theories of embodied experience, walking, or aesthetics to establish why the design serves as a counterpoint, but rather describes its effects as a reversal of filmic vision. To be clear, he had always intended for the *Tetraeder* itself to be a physical, embodied experience, but Christ continues to think about the aesthetics of his architecture through the lens of media. To the extent that the image of the tower has been reproduced and distributed through all conceivable media since its creation, Christ's framework is valid. At the same time, the physical experiences of ascending spoil tips and panoramic towers, whether Christ's *Tetraeder*, the Oberhausen Gasometer, the blast furnaces of *Landschaftspark Duisburg Nord*, or any of the headframes of Ruhr mines, make up a significant part the post-industrial landscape aesthetics of the IBA Emscher Park, and these experiences do

¹²⁶ Christ, Wolfgang. "Haldenereignis Emscherblick." 17 February 1992. Internationale Bauausstellung Emscher Park Papers, 378A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

¹²⁷ Christ, Wolfgang. "Haldenereignis Emscherblick in Bottrop. Der Aussichtsturm auf der Halde Beckstraße: Sehzeichen im Emscherpark." 11 September 1993. Internationale Bauausstellung Emscher Park Papers, 1176B. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

not necessitate media. The prerequisite to the full embodied experience of these sites is, instead, the physical ability to access them.¹²⁸

At the southwest base of the Halde Beckstraße, several signs inform visitors about the site's history and architecture. The multiple *Route der Industriekultur* signs inform visitors that the sixty-five-meter mining tip they are about to climb resulted from the piling of waste from the nearby Prosper Haniel mine from 1969 to 1993, and give brief outlines of the site's transformation from mining tip to "experience."¹²⁹ Across the texts, the terms "Zeichen" (symbol) and especially "Wahrzeichen" (landmark) recur, to emphasize the importance of the mining tips to the regional landscape:

Was bleibt sind Wahrzeichen. Halden im Revier sind Relikte des Steinkohlebergbaus. Aufgeschüttete Hügel aus Gesteinsmaterial, das beim Abbau der Kohle mitgefördert wird und seit den 60er Jahren aus Kostengründen nicht mehr nach Untertage zurückgebracht wird. In Aufbereitungsanlagen Übertage wird die geförderte Kohle gewaschen und vom Gestein getrennt. Diese »Waschberge« sind zum Wahrzeichen der Emscherregion geworden.

This text is part of the IBA Emscher Park's and *Route der Industriekultur*'s attempts to create a network of landmarks and panoramas in the region. By emphasizing these piles of waste as "landmarks" and "relics of anthracite mining," the sign avoids any negative associations with pollution or public nuisance as "eyesores" that they may have had. We will see echoes of this in my discussion of Christ's *Pegelturm* below.

¹²⁸ Accessibility is a major problem across the post-industrial landscape aesthetics that I investigate in this dissertation. Much of this has to do with the fact that the industrial complexes in question were designed to maximize the exploitation of physical human labor, and therefore unquestioningly excluded people with disabilities. However, the implicit ableism of nature-bound concepts of health, exercise, and adventure is also at play in sites of "Industrienatur." See the first chapter of this dissertation for further discussion of this.

¹²⁹ See the first chapter of this dissertation for more information about the relationship between the IBA Emscher Park and the subsequent establishment of the *Route der Industriekultur*.



Figure 3.4: *Emscher Landschaftspark* sign for the *Halde Beckstraße mit Tetraeder*. Photo: Author, 2018.

The *Emscher Landschaftspark* sign for the *Halde Beckstraße mit Tetraeder* offers visitors an idea of what kind of experiences to expect from the *Tetraeder*, as well as a suggestion for how to interpret the site. A large graphic shows the silhouette of a winged figure in a helmet and boots, who carries an equilateral triangle in mid-flight. “Den Traum vom Fliegen träumen die Menschen seit jeher,” the text states, before going on to cite the ancient Greek myth of Daedalus

and Icarus, and the inventions of Leonardo da Vinci, Otto Lilienthal, and the Wright brothers as examples of this dream to fly. This triumphal arc of aeronautic innovation is unencumbered in the text by any mention of Icarus' fate. Instead, the text goes on to describe how the visitor can experience the feelings of these flight pioneers by braving it to the top of the Tetraeder, and what awaits them at the top:

Das Gefühl dieser Luftfahrtpioniere können Besucher nachempfinden, die sich auf die höchste Plattform des begehbaren Tetraeders wagen, der die Haldenkuppe krönt. Dort oben kann man sich den Wind um die Nase wehen lassen. Der Boden schwingt unter den Füßen, und die Welt liegt tief unter einem. Auch wenn es eine Vielzahl von Hochpunkten im Emscher Landschaftspark gibt eine Besteigung des Tetraeders ist ein atemberaubendes Erlebnis und der Ausblick wahrlich spektakulär.

Just as the sign's text refrains from giving any spoilers about what happens to Icarus, it also omits any commentary on the trajectory of the local coal industry from dreams of achievement, through a heated peak of productivity, to a final dénouement. Its tone is singularly triumphal, as though channeling a sense of progress through technology. The implicit message here is that the techniques of mining tip remediation and post-industrial landscape aesthetics on display at the Halde Beckstraße are part of an upward trend, in which the combination of artistic and architectural innovation can outpace the consequences of deindustrialization. This is a dubious notion, as we shall see especially clearly in the case studies at Lake Goitzsche below.

The elements of air and earth are palpable in this description, with the wind in one's face, the swaying floor, and the earth far below. Even the adjective "breathtaking" emphasizes the fundamental connections among the visitors's emotional and aesthetic experiences, and the material realities of physical embodiment and respiration. The triangle that appears in the hands of the silhouetted Icarus figure's hands evokes the outline of Christ's *Tetraeder*, but also happens to be the alchemical symbol for fire—a subject to which I will return later.

After passing the signs, visitors can choose from among several interconnected paths to reach the summit: two paved roads—one with switchbacks, the other a long spiral—offer the

visitor gradual climbs to the top, while a staircase provides the most direct and physically taxing ascent.¹³⁰ As one climbs the mining tip, the landscaped vegetation that covers the mining waste grows shorter, as though stunted by a higher-altitude climate. The air, too, becomes noticeably fresher and more breezy, accentuating the impression of a small-scale mountain climb. At each level of the tiered mound, unpaved loop trails offer visitors the opportunity to walk their pets or otherwise to enjoy off-road experiences in more “naturalistic” settings. The shape of the mining tip is apparent at all points on these trails, which are completely level, and bordered on either side by uniformly graded slopes. Nevertheless, the dense foliage in summer can obscure the visitor’s sight of the surrounding area, such that only the shape of the terrain reminds them of the site’s artificiality.

At the summit, a rationale for the increasingly short vegetation becomes as clear as the unobstructed view of the Ruhr region. Information panels and telescopes line the edges of the plateau, such that visitors may identify the regional landmarks that they see. In the center of the plateau, a field of very coarse gravel, bordering on loose stone, forms a depression that collects rainwater, ruderal vegetation, rabbit feces, and remnants of visitors’ uses of tobacco, alcohol, and fireworks. And above all this looms the *Tetraeder*.

¹³⁰ I overheard an older man and a young girl counting their stairs on their way down: they independently reached 364 and 366 stairs, to which the man suggested splitting the difference for a more easily memorable total of 365, unless the girl wished to go back up and count them again. She declined.



Figure 3.5: Wolfgang Christ's *Tetraeder*. Photo: Author, 2018.

Before the visitor even sets foot upon the *Tetraeder*, a glance at its airy construction reveals three different platforms connected by suspended staircases. Like the stairs, the first and third platforms hang from the frame of the *Tetraeder* by steel cables. Light filters through the metal grating that comprises the steps, and the floors of the first two platforms. As the visitors walks along the perimeter of the plateau, the apparent geometry within the *Tetraeder* changes with the visitor's perspective. From below the *Tetraeder*, one can hear the footsteps and the reactions of other visitors as they climb the tower. As their different movements send vibrations through the structure and cause it to sway, ethereal sounds emanate from the cables under tension. The conversations that pass down through the air from above often revolve around two main topics: the fear of heights and the visible landmarks. The experience of ascending the

Tetraeder varies greatly depending on whether or not the visitor suffers from any aversion to heights. Those who enjoy climbing sports, who work on scaffolds or in other high places, and others—such as adventurous children—whom heights do not bother, may enjoy the *Tetraeder* and its views without issue. For the rest of us, the *Tetraeder* offers a test of determination. The social dynamics of visiting with friends or family adds additional considerations, such as pressure or encouragement.

Should one resolve to go up the tower, one will immediately feel the floor beneath them sag and bounce in response to one's footsteps. The first platform offers an opportunity for the visitor to catch their breath and survey the panorama before climbing higher—although particularly sensitive visitors might choose not to continue. As though in compensation for its higher elevation, the second platform is firmly affixed to the frame of the *Tetraeder*, and therefore grants the visitor some respite from the swaying. The view of the Ruhr improves significantly from the first platform to the second, and may be sufficiently spectacular for visitors who find themselves uncertain about whether or not to keep climbing. For those who do, a spiral staircase enclosed in metal mesh leads to the final platform, which offers one final twist: the ring-shaped platform, which features completely opaque guard walls and floor, is tilted eight degrees downward from the point where the visitor exits the stairs. The angle of the platform increases any feelings of spatial disorientation or vertigo that the visitor may feel, and yet its solid walls and floor offer the visitor a greater sense of security than the other platforms' metal grating.

Even though one-third of the beams of the *Tetraeder* are level, the placement of the platforms does not intersect any planes on which the tower's frame could offer a stable reference for orientation. Instead, the one constant visual marker of the horizontal is the horizon itself. As a byproduct—or perhaps an intended aspect—of Christ's design, the panorama of the Ruhr that the

visitor can see from within the *Tetraeder* is also the only visual anchor that the visitor has, with which to counteract the kinetic and angular instability of the *Tetraeder*'s platforms. Christ intended for the beams of the *Tetraeder* to frame the visitor's views of the Ruhr.¹³¹ Thus, Christ's panoramic lookout tower not only presents a challenge to its height-sensitive visitors, it also turns the panorama itself into that which gives the visitor any sense of stability. To be clear, Klaus Bollinger, the engineer who made ensured that Christ's design would work, and that any danger would be in the visitors' mind only; the *Tetraeder* is completely safe to climb, as any publicly-accessible structure would have to be.

The *Tetraeder* is an airy structure: despite its enormous mass and stability, its open sides and suspended, see-through walkways give the visitor the impression of ascending into the sky. Here, the visitor is completely exposed to the elements: the lightest breeze or precipitation passes straight through the structure. The *Tetraeder* is necessarily closed to the public during the winter due to prevailing freezing conditions, and the potential act of climbing it during a lightning storm at any time of year seems not to need any explicit discouragement. On a milder day, the visitor will feel the relative temperature of the atmosphere, either from the chill of wind or rain, or from the heat of the sun and humidity. Furthermore, the entire panoramic effect of the *Tetraeder* depends on atmospheric conditions: not only will haze, fog, and rain reduce visibility, but even the diffuse light of an overcast day will create a markedly different effect from a partially sunny or fully cloudless day. The brightness, contrast, sharpness, contours, and shadows of the panorama, with which the visitor can make out the surrounding post-industrial landscape, depend fully on the weather. In these regards, the *Tetraeder* relies upon nature to realize its aesthetic effects.

The fact that the *Tetraeder*'s aesthetic effects depend upon the weather reflects the

¹³¹ Christ, Wolfgang. Personal Interview. 4 June 2018.

concept of “atmosphere” that is crucial to Gernot Böhme’s aesthetics:

Der primäre *Gegenstand* der Wahrnehmung sind die Atmosphären. Es sind weder Empfindungen noch Gestalten, noch Gegenstände oder deren Konstellationen, wie die Gestaltpsychologie meinte, was zuerst und unmittelbar wahrgenommen wird, sondern es sind die Atmosphären, auf deren Hintergrund dann durch den analytischen Blick so etwas wie Gegenstände, Formen, Farben usw. unterschieden werden.¹³²

It should be noted that these atmospheres are not necessarily the earth’s atmosphere in an ecological sense, although the latter can play a significant role in determining the former, as is the case in the view from the *Tetraeder*.¹³³ What the Böhmes would identify here as atmospheric would be the aesthetic effects of both the *Tetraeder* itself and the earth’s atmosphere, such as the visitor’s perception of heat, cold, wind, or rain while standing on one of the viewing platforms. These immediate sensations do not exhaust the potential aesthetic effects of atmospheres in the Böhmes’ view, however. Gernot Böhme identifies two types of characters of materials that can be perceived through atmospheres: synaesthetic (synästhetisch) and social (gesellschaftlich). As examples of synaesthetic characters, Böhme returns to cold and warm. In this case, however, is it not merely the relative temperature and the heat conductivity of a material to a human body that is intended, but also associations of coldness and warmth that cross the boundaries of distinct senses, as with the colors blue (cold) and red (warm), or with glossy (icy) or matte (warm) surfaces:

Was man aber im atmosphärischen Spüren als Kälte oder Wärme eines Materials bezeichnet, ist etwas ganz anderes, und dieses andere, sein synästhetischer Charakter, kann durch verschiedene objektive Eigenschaften erzeugt werden. So Kälte etwa durch glatte, glassige Oberfläche, aber ebenso durch blaue Farbe. Wärme dagegen durch Rote Farbe, aber auch durch Holzcharakter, durch Mattheit.¹³⁴

Synaesthetic characters of materials are therefore determined not only by the individual sensory perceptions from which they derive their names, but also by related effects in other senses, by contextual contingencies, and by generic associations. To this extent, the *Tetraeder* may be

¹³² Böhme 1995, pp. 48.

¹³³ The Böhmes would characterize the chemistry of the gases we breathe, the study of meteorology, and other scientific approaches to the atmosphere as part of a contemporary resurgence of elemental thinking in scientific discourses, in this case as a matter of air.

¹³⁴ Ibid., pp. 55.

perceived to be cold, not only because of any given weather, but also because of its bare, minimalist metal frame, or the predominance of blue and gray hues between the sky and the stone top of Halde Beckstraße.

The influence of associations is even stronger, more abstract, and more emotive in the case of what Böhme calls social character. He writes that materials have social characters according to the particular lifestyles with which those materials are associated:

Materialien haben gesellschaftliche Charaktere, insofern sie eine Atmosphäre ausstrahlen, die zu einer bestimmten Lebensform gehört. Glanz im Sinne von Pracht, kann ein solcher Charakter sein. Reichtum ist mit Sicherheit ein solcher gesellschaftlicher Charakter, ebenso Gediegenheit. Weitere gesellschaftliche Charaktere sind: rustikal, elegant, vornehm. Auch dies sind nur die größten Charakterisierungen. Wichtig ist, daß diese Charaktere kulturellem Wandel und sogar der Mode unterliegen.¹³⁵

This passage raises the question: what are the social characters of the *Tetraeder*? Because social character is contingent upon the visitor, their associations, their experiences, and their socialization, no single definitive answer can suffice. Nevertheless, several common possibilities should be considered. The experience of the *Tetraeder* can be sublime, if the weather is particularly dramatic, and if the visitor is sensitive to heights, particularly when standing on see-through metal grating. It can alternately be entertaining or exhilarating, if the visitor enjoys such experiences and seeks the *Tetraeder* as a destination for recreational purposes.

In order to spell out the implications of associating the *Tetraeder* with the element of fire, I propose a further layer of signification based upon its form. Plato synthesized his elemental and geometric theories by associating each of the four elements, plus the quintessence or “fifth element,” with one of the Platonic solids (three-dimensional geometric figures, or polyhedra, with regular polygon faces). Of these pairings, Plato assigned fire to the simplest polyhedron, the tetrahedron.¹³⁶ Christ learned of this association, albeit a couple weeks after he came up with the

¹³⁵ Ibid., pp. 55-56.

¹³⁶ Böhme and Böhme, pp. 100-111. The associations of triangles and tetrahedrons with fire persist in the so-called *Verbrennungsdreieck* (“fire triangle”) and *Brandtetraeder* (“fire tetrahedron”), which serve educational purposes in

tetrahedral design.¹³⁷ To apply the Böhmes' elemental theory in the context of the transformation of the post-industrial landscape, a further detail is needed: Plato constructed a theory of mutability among the elements based upon their geometry. Thus fire (tetrahedron), made of four equilateral triangles, could become air (octahedron), which consisted of eight triangles, or water (icosahedron), which consisted of twenty.¹³⁸ Western alchemy reflect these concepts of geometric mutability in the symbols for each of the four classical elements: depending on orientation, an empty triangle stands for either fire (pointing up up; recall the symbol held in the hands of the Icarus-figure on the sign for the Halde Beckstraße mit Tetraeder) or water (down), while a triangle with a horizontal line through it stands for either air (up) or earth (down). At some point along the development of alchemy to modern chemistry, the equilateral triangle of fire narrowed to become the Greek capital letter delta (Δ) seen above the arrow in the chemical equations of reactions that require the addition of heat to proceed.¹³⁹ As the triangle in a chemical equation signifies a condition of reaction, rather than a reagent consumed by that reaction, I propose that the Tetraeder be understood as a symbol of catalysis in the post-industrial transformations of the IBA Emscher Park. Unto itself, it did and does not create the desired change within the region. Rather, it creates the conditions for changing perceptions: the visitor's climb to the top of the tip, their panoramic view over the Ruhr, and the combination of observation and contemplation that renders the physically transformed landscape aesthetically

physical chemistry, pyrotechnics, and firefighting, to illustrate to start, sustain, control, and extinguish fires. These are educational diagrams that illustrate the necessary ingredients or conditions for the ignition and continuation of combustion. The three sides of the fire triangle, which invariably appears with the same orientation as the alchemical symbol for fire, represent the three things required to ignite a fire: fuel, heat, and oxygen. To these three ingredients the fire tetrahedron, which represents the necessary conditions for a continued burn, adds the uninhibited chemical chain reaction that releases additional heat into the system.

¹³⁷ Christ, Wolfgang. Personal Interview. 4 June 2018.

¹³⁸ Böhme and Böhme, pp. 100-111. Squares and pentagons posed greater conceptual difficulties for Plato, who assigned the cube to earth, and the twelve-sided, pentagon-faced dodecahedron to the mystical quintessence.

¹³⁹ The etymology of this symbol is open for debate, but this particular use of delta should be seen as distinct from its more general use to indicate a change in quantity.

recognizable as more than just terrain.

Sculpture Forest Rheinelbe, and Spiral Mountain with the Stairway to Heaven

Zeche Rheinelbe, which had been active between 1855 and 1928, shut down before the development of *Tafelberge*, and long before the decline of Ruhr industries of the 1960s. As a result of this early shutdown, demolition and subsequent ecological succession were much more complete at Rheinelbe than at most other mines and industrial complexes throughout the Ruhr, and the spoil heap at the southern end of the grounds was of the *Spitzkegel* type, and developed “Warmstellen,” of about 750-800° C.¹⁴⁰

Here, Ganser wanted to break the mold of traditional landscape architectural solutions to brownfield reuse. Preserving a section of the post-industrial landscape with as little intervention as possible was one of Ganser’s primary goals for the *Restflächenprojekt*, started in 1994, as it was called before he handed control of the site to Prigann and to the state forestry agency. In his experience as an urban planner, Ganser had grown disillusioned with grand designs that bulldozed existing terrain and replaced it with entirely new landscaping at great cost, and with little concern for the viability of the inserted vegetation.¹⁴¹ With this in mind, the grounds of the Rheinelbe mine were legally recategorized as a forest, so that the site would require much less maintenance than a public park.¹⁴² In 1995, the same year that Christ’s *Tetraeder* opened to the public atop Halde Beckstraße, Ganser approached Prigann with an offer: to assume full responsibility for the creative redesign of the post-industrial forest of the abandoned Rheinelbe

¹⁴⁰ Günter, Roland. *Karl Ganser: Ein Mann setzt Zeichen: Eine Planer-Biografie mit der IBA in der Metropole Ruhr*. Essen Klartext, 2010, pp. 27-31.

¹⁴¹ Günter 2010, pp. 191.

¹⁴² “Juristisch werden die Flächen als Wald behandelt. Die Kategorie Wald erlaubt etwas mehr Spielraum bei der Verkehrssicherungspflicht als dies bei öffentlichen Grünflächen der Fall ist. Trotzdem müssen natürlich offenkundige Gefahrenpunkte durch die Förster beseitigt werden.” Dettmar, Jörg. “Ökologische und Ästhetische Aspekte der Sukzession auf Industriebrachen.” In: Prigann, Strelow, and David, pp. 129.

mine.¹⁴³

Ganser proposed *Nichtstun* (“Doing nothing”) against the two extremes of razing decommissioned industrial sites in the name of recultivation, on one hand, and the complete historical restoration of already decaying industrial infrastructures, on the other.¹⁴⁴ This hands-off approach would leave nature, in the form of ecological succession, to its own resources, and allow a romantic appreciation of industrial ruins to develop among explorers – all without unnecessary costs to the state.¹⁴⁵ A completely untouched site would, however, not only pose potential risks to public safety, but also lose its particularly industrial character.

As the forest of on the grounds of the former Rheinelbe mine grows, its biodiversity decreasingly resembles that of a uniquely post-industrial forest. The ruderal vegetation that thrives in recently decommissioned or abandoned industrial sites gives way to more conventional flora.¹⁴⁶ This is the natural course of ecological succession: the pioneer species capable of thriving in heavily contaminated soils perform bioremediation, either by dispersing the contaminants or by rendering them less biologically active; their roots further disrupt and aerate the soil, and when they die, their decomposition contributes missing nutrients to the soil. On this basis, less specialized species can take root, and the biodiversity of the brownfield grows to resemble that of the surrounding region. The forester’s intervention here does not affect the rate at which succession obscures its own work; instead, the forester attends to the safety of the public and of the health of the overall ecosystem, making the smallest necessary interventions. It would be incredibly difficult, costly, and impractical to attempt to freeze the site in a state of suspended succession, in order to preserve the unique pioneer species of the brownfield. One

¹⁴³ Günter 2010, pp. 276

¹⁴⁴ Ganser, Karl. “Kunst gibt dem ökologischen Wandel ein Gesicht.” *Kunst setzt Zeichen: Landmarken-Kunst*. Pachnicke, Peter editor. Oberhausen: Ludwig Galerie Schloss Oberhausen, 1999, pp. 10-11.

¹⁴⁵ Ganser, Karl. “Denkmal- und Naturschutz für Industriekultur?” *Der Architekt*. Essen: Bund Deutscher Architekten, Issue 5, May 1997, pp. 294-296.

¹⁴⁶ Dettmar 2004, pp. 129. See also: Ganser 1999, pp. 11.

would either have to replenish the contamination in the soil at the same rate as the bioremediation neutralizes it, or to aggressively weed out all non-pioneer species. So, as the forest loses its visibly post-industrial character, the contrast between what is perceptible as the remains of industry and what appears to be entirely natural can only be maintained through artistic interventions. Ganser conceived of such interventions as minimal “künstlerische Setzungen” that would make the visitor aware of the site’s processes of transformation.¹⁴⁷ In 1995, Ganser asked Prigann to take on the task of the *Restflächenprojekt*, which then became the *Skulpturenwald*.

In contrast to Ganser’s focus on the value of *Nichtstun* and on processes of industrial ruination, Prigann brought to the project a nascent concept of active artistic partnership between humankind and nature, which he would later formulate under the term “ökologische Ästhetik.” Roughly stated, this ecological aesthetics operated as a guiding principle for his artistic creation and for engaging with the environment, according to which the agency of nature is taken into account as an equal collaborator in the realization of human designs, which should themselves hold the environment in equal esteem to that of human society. A consequence of this concept is that industry and nature are not to be understood as antitheses in the postindustrial landscape. Instead, while industrial resource extraction and processing represented an extreme imbalance between the agencies of humans and of nature, the paradigm that Prigann aimed to exemplify was not one in which nature reestablishes its dominance over the material remains of industry, as Ganser would have it, but rather one in which the relationship between the well-being of humankind and that of all other forms of life on the planet does not resemble a zero-sum game. In this sense, Prigann skips the dialectical thrust of Ganser’s and Dettmar’s idea of *Industrienatur*, and attempts to reconcile the amalgam of *Industriekultur*, including all of its

¹⁴⁷ Ganser 1999, pp. 12.

contradictions between honoring working-class history and culture and celebrating technological ingenuity, with the post-industrial infatuation with processes of entropy, ruderal growth, ruination, and urban exploration.¹⁴⁸ So, although Prigann differed with Ganser on the ideal relationship between the natural and the anthropogenic, they shared an understanding that the unique qualities of brownfields, with their spontaneous ecological succession, should be preserved and made accessible to the public.

The IBA Emscher Park approached the State Forestry Agency with the concept, and the official start of the project came in June 1996, when the grounds were contractually acquired. Since then, forester Oliver Balke has been responsible for the *Forststation Rheinelbe* (“Forester’s Station Rheinelbe”). Balke’s vegetation-related responsibilities are limited to clearing trees that pose a threat to visitors’ safety, keeping Prigann’s works visible, and minimal interventions for the purpose of protecting the site’s biodiversity. Part of the emphasis is the particularity of the biodiversity of the site. Not only do the flora and fauna differ from old-growth forests, but even the stages of succession are unique in the *Skulpturenwald*. Unlike in many other areas, neophytes—often referred to as “invasive species”—are allowed free reign here.¹⁴⁹ Visitors may encounter neophytes such as Japanese knotweed (*Fallopia japonica*), sticky bedstraw (*Galium aparine*), and several forms of ragwort, as well as other weeds, including raspberry and stinging nettle. By allowing these plants to grow unchecked, the foresters at the *Skulpturenwald Reheinelbe* allow the site to develop in the most “natural” way possible.

The foresters are also responsible for social programming: Balke estimates that roughly one third of their work consists of hosting events, and groups of children and adults. Two-thirds of the public events that the foresters host in the *Skulpturenwald* are for childrens’ groups,

¹⁴⁸ See the first chapter of this dissertation for my discussion of the term *Industrienatur*.

¹⁴⁹ Balke, Oliver. Personal Interview. 25 May 2018.

primarily kindergarten-aged, but also elementary school groups. This has to do with the greater demand for environmental education. While most of the adult groups come from the Ruhr and North-Rhine Westphalia, Balke notes that groups from around the world have visited.

The childrens' groups are all from large urban areas; according to Balke, most of the children have either no experience with green spaces like Rheinelbe, or are seldom outside in such areas. While greeting students, Balke decides whether to begin with a brief introduction, or to let the kids play around first. The first destination is then what Balke calls the "Waldrutsche"—forest slide. Here, Balke emphasizes the importance of granting children the freedom of self-determination in allowing them to do as they please, as a contrast to the highly-regimented schedules that they have at school. He claims that children suffer from a general lack of motion in their daily lives at school and at home, leading to problems with physical coordination and mobility, and that they have problems with their immune systems, because of the fact that they grow up in sterile environments. Balke repeatedly emphasizes the importance of allowing children to get themselves dirty, as a remedy to these problems. Then, Balke will generally lead the group on the search for animals. There is no fixed program, but rather a flexible schedule that Balke adapts to each group, the needs of the children, and any surprises that may arise in the forest. Adult groups are not as physically engaged as the childrens' groups, and Balke will tell them more about ecological succession, biodiversity, and the importance for humanity of the site.

To be certain, Balke's pedagogical program borrows from a long tradition of outdoors education in Germany. The premise of giving sickly inner-city children access to fresh air can be traced back to the pediatrician Adolf Blaginsky, who attempted to found a *Waldschule* for children with tuberculosis in 1881; however, the first such school to be opened came in 1904, in

Berlin.¹⁵⁰ Of course, the maladies that Balke attributes to his visitors are less acute than tuberculosis. Additionally, the general concept of addressing urban health problems by providing access to green space can alternately be traced to the Garden City Movement and its German offshoot.¹⁵¹ More proximate to Balke's pedagogical and immunological concerns are perhaps the Scandinavian-style *Waldkindergärten* that multiplied across Germany in the 1990s.¹⁵² Ultimately, Balke's educational programming and the rationales behind his pedagogy are fairly conventional. The most unconventional aspect about his work is where it takes place: on the grounds of a former mine.

Visitors not partaking in forester Balke's programming and those who are unfamiliar with the area may have difficulty locating the *Skulpturenwald Rheinelbe*. It is surrounded by nature protection areas, parks, and the back lots of private businesses and residences.¹⁵³ Nevertheless, those who regularly jog, ride bicycles, or simply explore the area will likely recognize the name *Himmelstreppe*, if not the location name "Halde Rheinelbe," and be able to offer directions to it. Because of the network of trails and bike paths that connect the *Skulpturenwald Rheinelbe* with other public green spaces in the area, visitors engaged in athletic recreation may pass through the site, perhaps without even recognizing it. Those who come to the site specifically do so for various reasons: to enjoy the view or to pilot drones from atop the spoil tip, to climb and/or paint graffiti on Prigann's *Himmelstreppe* and the site's ruined structures, to careen downhill through

¹⁵⁰ Hansen-Schaberg, Inge. "Natur als Heilstätte und pädagogischer Ort. Die Wald- und Freiluftschilderung und ihre Entwicklung in der ersten Hälfte des 20. Jahrhunderts" *Pneumologie*, no. 61, Stuttgart: Georg Thieme Verlag KG, 2007, pp. 374-380.

¹⁵¹ See Maciuika, John. "Cultural Fault Lines in the Wilhelmine Garden City Movement." *Before the Bauhaus. Architecture, Politics, and the German State, 1890-1920*. New York: Cambridge University Press, 2005, pp. 217-247.

¹⁵² See: Kane, Amanda, and Judy Kane. "Waldkindergarten in Germany." *Green Teacher*. Toronto: Green Teacher, No. 94, Fall 2011, pp. 16-19.

¹⁵³ Visitors who seek the Forststation Rheinelbe may be misled by its change of address—that is, not its relocation, but rather the official redesignation of its existing location from the somewhat proximate Leithestraße to the farther Virchowstraße, on which the large IBA sign for the Skulpturenwald can be found.

the woods on offroad bicycles, or simply to find unsupervised spaces for recreation.

Signs at the north and southeast entrances to the *Skulpturenwald* inform curious passersby about the history and ecology of the site. Visitors who stop to read these will learn that the Rheinelbe mine was active from 1861 to 1928, that the *Spiralberg* is another one of the Ruhr's mining tips, and the regional landmarks that one can see from the top. They will also find much more information about the biodiversity of the site, including lists of plants and birds that have overtaken the site, with special attention given to endangered species. Near these IBA-era signs, austere concrete slabs state the name of the *Skulpturenwald*, Prigann's name, the number of objects hidden in the site, and the dates Prigann worked on them. Evidence that at least some visitors take interest in these signs can be seen in the graffiti that covers them.



Figure 3.6: Emscher Landschaftspark sign for the Halde Rheinelbe mit Himmelstreppe. Photo: Author, 2018.

The *Emscher Landschaftspark* sign for the Halde Rheinelbe echoes that of the *Haldenereignis Emscherblick*, yet offers more reflection on the passing nature of architecture and the limits of human architectural endeavors. Its opening line, “Den Traum, in den Himmel zu steigen, träumt die Menschheit seit Jahrtausenden,” differs from the other by only a few synonymous substitutions. The examples in this case also pair a mythical—or biblical, to be precise—reference with one from modern engineering: the Tower of Babel and the Burj Khalifa in Dubai. However formulaic the copy for the Emscher Landschaftspark signs may be, it is worth noting that for the *Himmelstreppe*, the moral of the biblical story plays a role in the subsequent description of Prigann’s work. Here, the text introduces the artist and the *Himmelstreppe*, and returns to the themes of ruination and the danger of ambition:

Dem Künstler Herman Prigann, der die »Himmelstreppe« auf der Halde Rheinelbe geschaffen hat, war die freie Interpretation seiner Skulptur durch den Betrachter wichtig. Aus ehemaligen Fundamentblöcken abgebrochener Industriehallen und Produktionsanlagen aufgetürmt, weist sie vielleicht auf die Vergänglichkeit aller baulichen Versuche hin und die Gefahr, zu hoch hinaus zu wollen.

Whereas the Emscher Landschaftspark sign for the *Tetraeder* emphasized human ambition and technological progress without mentioning the fall of Icarus, this sign acknowledges the transitory nature of all human constructions and positions the *Himmelstreppe* as a cautionary monument or memento mori. At the same time, the “Gefahr, zu hoch hinaus zu wollen” also applies to the sculpture itself. The illustration on the sign shows a figure stepping from the top block of the *Himmelstreppe* onto a nearby cloud, while a second figure sits contemplatively on another cloud, floating away. With the exception of the illustration’s proportions and the clouds’ ability to carry passengers, however, the drawing realistically depicts the *Himmelstreppe* and a common activity undertaken by its visitors. The *Himmelstreppe* quite literally offers any willing and capable visitors the opportunity to come several steps closer to realizing “Den Traum, in den Himmel zu steigen.”

One need not judge by the graffiti that spreads to the top stone of the *Himmelstreppe* to confirm its use as a climbing wall: adventurous, able-bodied youth ascend Prigann's artwork even in broad daylight. Despite the clear danger to life and limb, the site is free of the usual warning, prohibition, and liability waiver signs that generally demarcate any less than fool-proof public spaces and parks in Germany. Prigann disapproved of this use of his artwork, and made several attempts to prevent such dangerous activity. Throughout the early 2000s he made several requests for warning and prohibition signs to be installed, and after these went unheeded, he finally proposed a more drastic intervention.¹⁵⁴ In 2004, he wrote a letter to Wolfgang Quecke, operations director of Remediation of Mining Sites of the Deutsche Steinkohle AG, and included the following recommendation to install a metal band with spikes as a deterrent to would-be climbers:

Ich habe mehrfach diese höchst gefährliche Kletterei beobachtet, die jungen Leute ersteigen zum Teil mit Bierkästen die Steine. Wir wollen uns nicht vorstellen was geschehen kann und die öffentlichen Folgen. Da die DSK laut Herrn Börth/Forsten die Verkehrssicherungspflicht wahrnehmen muss, ersuche ich Sie dringend hier etwas zur Verhinderung des Bekletterns zu veranlassen. Mein Vorschlag wäre in der unteren Ebene/zweite Steinlage einen Stahlstreifen mit Dornen anbringen zu lassen, dann ist Ruhe und wir müssen nichts befürchten.¹⁵⁵

A response from Quecke doesn't appear among Prigann's documents, but the state of the *Himmelstreppe* today shows that no such action was taken.

¹⁵⁴ Nachlass Herman Prigann. Rheinisches Archiv für Künstlernachlässe, Bonn, Germany.

¹⁵⁵ Ibid.



Figure 3.7, left to right: *Eckpfeiler*, *Schieber*, and *Pfeiler mit Bombe*, sculptures by Herman Prigann in the *Skulpturenwald Rheinelbe*. Photos: Author, 2018.

As the visitor walks along the network of paths through the *Skulpturenwald*, they encounter the sculptures that Prigann assembled from found materials, both natural and industrial. Most of the sculptures consist of concrete slabs and rusting machine parts, stacked atop one another in large, henge-like arrangements. Some include raw tree trunks, stripped of their bark. The larger sculptures in the forest stand in recesses along the main trails and roads, and one even arches over a narrow path. These structures stand in contrast to the surrounding woods, and yet their placement among the trees and low-growing vegetation means that in many cases, they are not visible until the visitor is almost in front of them. The sculptures' elements of surprise and artificiality interrupt the otherwise naturalistic character of the *Skulpturenwald*, and invite the visitor to observe a staged version of the natural overgrowth of the industrial past.

The material properties of their surfaces give evidence to processes of growth and decay. Metal rusts, while both wood and concrete – to differing degrees – weather and harbor moss and lichen.¹⁵⁶ Two sculptures incorporated decay so well, in fact, that they collapsed: on either side

¹⁵⁶ This is part of what Gernot Böhme discusses in “Der Glanz des Materials,” particularly in the example of particle board: it isn’t the material itself, but rather the appearance of its surface that creates atmospheric effects. In this case, the atmosphere created is melancholic, ruinous, romantic – all of which are social characters, in the sense that they

of one gateway, pyramid-shaped stacks of concrete slabs stood upon vertical logs, until those logs gave way to decomposition and the weight of the concrete. While Prigann had hoped that the process would be slow, and therefore visible to visitors over an extended period of time, the efficiency of nature far exceeded his expectations and the estimates of “experts.”¹⁵⁷ A visitor walking her dog witnessed the collapse of one of the gates, and reported it.¹⁵⁸ Due to the clear danger to visitors, Prigann redesigned all of the gateways, so that the wooden posts would be laid horizontally, and the concrete piles would rest upon them.

Together with Prigann’s ruinous sculptures, the physical remains of the Rheinelbe mine make the *Skulpturenwald*’s post-industrial character perceptible. Even if signs introduce the site’s history to interested visitors, that information alone is not sufficient to make the site look and feel like part of a post-industrial landscape. This is where Prigann’s work comes into dialogue with other nearby green spaces of the IBA Emscher Park, in particular Peter Latz’ prize-winning and often-cited Landscape Park Duisburg-North.¹⁵⁹ The contrasts between the two sites are significant: the latter is a park, whose design that integrates the extensive infrastructure of a steel mill, including its towering blast furnaces, casting house, and gas holder. The *Skulpturenwald*, by contrast, retains only the control house, conserved and repurposed as the Rheinelbe Forest Station, a crumbling explosives bunker, a leaning tower, and some mossy rubble. DeSilvey notes the southern African origins of the narrow-leaved ragwort that she observed at the Duisburg-

are associated with specific. They do not make that past visible or tangible, however.

¹⁵⁷ In a report on the state of the works of art in the *Skulpturenwald*, Prigann wrote about vandalism and the unexpected rate of decomposition: “Auch die Einschätzung der Fäulnisprozesse an den Eichenstämmen – ‘Die Tore’ – ist von mir und Fachleuten als zu lang angenommen worden.” Prigann, Herman. “RHEINELBE zweite Realisierungsphase SKULPTURENWALD.” September 2003. Nachlass Herman Prigann. Rheinisches Archiv für Künstlernachlässe, Bonn.

¹⁵⁸ Günter 2008, pp. 39.

¹⁵⁹ See, for example: James-Chakraborty, Kathleen. “Recycling Landscape: Wasteland into Culture.” *Trash Culture: Objects and Obsolescence in Cultural Perspective*. Pye, Gillian, editor. New York: Peter Lang, 2010, pp. 77-94; Latz, Peter. *Rust Red: Landscape Park Duisburg-Nord*. Munich: Hirmer, 2016; Weilacher, Udo. *Syntax of Landscape: The Landscape Architecture of Peter Latz and Partners*. Basel: Birkhäuser, 2008 Barndt 2010, pp. 270-93; DeSilvey 2017, pp. 97-126; Hemmings and Kagel 2010, pp. 243-261; Rosenberg, pp. 209-230.

Meiderich park; Prigann and Balke, too, identified this species in the *Skulpturenwald*.¹⁶⁰ Where the *Skulpturenwald* stands apart is in its relative lack of intervention. While DeSilvey comments on the intentional lack of weeding that takes place at Latz' park, the fact remains that most of the remaining industrial infrastructure must be carefully preserved for the sake of public safety. With a negligible media presence, only a few remaining brick and concrete structures requiring little maintenance, and only two employees, the *Skulpturenwald Rheinelbe* offers visitors not only the opportunity to experience a post-industrial site at an advanced stage of ecological succession, but also to do so with the kind of freedoms to be adventurous and subversive that Tim Edensor attributes to the possibilities of industrial ruins.¹⁶¹



Figure 3.8: *Bergmannssäulen* by Herman Prigann in the *Skulpturenwald Rheinelbe*. Photos: Author, 2018.

In 2004-2005, Prigann added a new set of sculptures: a series of what he called *Bergmannssäulen* – thin concrete slabs into which he embedded miners' tools and pieces of coal and slag, and etched lines of poetry written by local coal miners. One of these slabs bears no text, but instead lies broken on the ground, as one might see in any cemetery with headstones old and

¹⁶⁰ DeSilvey, pp. 97; Günter 2008, pp. 35.

¹⁶¹ Edensor, Tim. *Industrial Ruins: Spaces, Aesthetics and Materiality*. New York: Berg, 2005.

thin enough to break from fallen branches or vandalism. The earliest poem is attributed to an anonymous poet, with the year 1789; the other poets Prigann quotes are “H. Kusters,” with a date that disappears into the dirt and moss; “H. Kämpen [sic],” 1912; G. Westerhoff, 1923; and K. Küther, 1929. The dates on each stone are birth dates, and the last three poet-miners are as follow: Heinrich Kämpchen (1847-1912), who helped to organize a miners’ strike in 1898, and wrote socially critical poetry as an autodidact;¹⁶² Günter Westerhoff (1923-2015), who was a member of the “Dortmunder Gruppe ’61,” a literary circle concerned with industrial labor, and received the Ruhr Prize for Mülheim Arts and Sciences;¹⁶³ and Kurt Küther (1929-2012), who began to write critical prose and poetry about mining labor in the 1960s, also as part of the “Gruppe ’61.”¹⁶⁴ With the exception of Westerhoff’s poem, “Verlassene Zeche,” the Bergmannssäulen give no titles, much less any further bibliographical information.

Like Prigann’s wordless sculptures, the texts and materials of the *Bergmannssäulen* point to a history of mining that is not immediately apparent on the grounds of the *Skulpturenwald*. Although Prigann’s sculptures could be read as false ruins and headstones, the site is not uniformly melancholic about the deindustrialization of the Ruhr.¹⁶⁵ Apart from the valorization of nature that Ganser’s *Industrienatur* and Prigann’s ecological aesthetics both entail a critique of industrial exploitation of labor and the environment is legible in the “Bergmannssäulen.” Take, for instance, Küther’s “Abbauhammer”: “Narbige Fäuste / Lebendige Klammer / Umspannt den Griff / Am Abbauhammer / Lässt ihn sich in die / Kohle fressen / Dröhnend / Wie besessen. /

¹⁶² “Heinrich Kämpchen.” *Lexikon Westfälischer Autorinnen und Autoren 1750 bis 1950*. Münster: Literaturkommission für Westfalen, 2001. Web.

¹⁶³ See: Herholz, Gerd, editor. *Stimmenwechsel. Poesie längs der Ruhr*. Klartext Verlag, Essen 2010, pp. 144. See also: Karl, Paul. “Soziale Erfahrungen, in Worte gefasst. Arbeiterschriftsteller Günter Westerhoff 80 Jahre alt.” *Unsere Zeit. Sozialistische Wochenzeitung. Zeitung der DKP*. Essen: CommPress Verlag, 28 March 2003. Web.

¹⁶⁴ See: “Kurt Küther.” *Lexikon Westfälischer Autorinnen und Autoren 1750 bis 1950*. Münster: Literaturkommission für Westfalen, 2001. Web.

¹⁶⁵ The evocation of false ruins within post-industrial landscape projects is widespread, often because the appearance of ruination has been cultivated, despite state-of-the-art industrial heritage preservation techniques. In some cases, false ruins evoke a longer history of English landscape gardens. See: Barndt, pp. 279-281.

Hämmern, hämmern / Sich ins Leben! / Bergmanns Tod: / Du Abbauhammer!” Read literally, this text evokes the impact of mining on human health and life, although the damage to the earth is perceptible in the mining hammer’s feast of coal. Yet the sonic aspects of hammering and droning in the dark depths of a mine contrast sharply with the open atmosphere of the *Skulpturenwald* and the sounds of wildlife, the wind in the trees, and other visitors. In the context of Prigann’s ecological aesthetics, this passage stands as a reminder of the mutually injurious effect of mining in the relationship between humans and nature.

Prigann elaborates on this theme with a passage from Kämpchen: “... und seh’ ich deine / Schlote rauchen, / Weiss doch, dass sie / Gift nur hauchen – / Weiss wie an den / Feueressen / Der arme Fröner / Schnell verdirbt – / Will den Bergmann / Nicht / Vergessen, der / Einen / Frühen Todes stirbt.” From these lines, I wish to highlight the fact that the air—as part of nature—is impacted alongside the laborer. As the smokestacks emit smoke and poisonous gases, the word “Feueresse,” synonym for both smokestack and for (metallurgical) furnace, points to the impetus for coal mining: fire, or rather the energy released by the combustion of fossil fuels. Both of these poems also address the death of the industrial laborer, and in these cases, Prigann’s *Bergmannssäulen* can be read as headstones for miners injured, poisoned, or killed through work. However, this reading is complicated by another piece, which features a passage from Westerhoff’s “Verlassene Zeche”: “Am / Morgen / Warf sich / Schreiend / Ab vom / Toten / Förderturm / Ein / Falkenpaar / Und floh.” In this passage, there is no miner whose death could be commemorated by the *Bergmannssäule*. Instead, the mine’s headframe is that which bears the adjective “dead,” and in this case the tone of the poem cannot clearly be identified as one of lamentation, elegy, or obsequy. This is important, because the death of the mine creates a wild space in which the pair of falcons can live, fly, and make noise. This passage brings us back to

Prigann's ecological aesthetics through its portrayal of how nature reclaims mining structures: what remains of the mine is not an ecological burden, but instead it offers a necessary perch for the pair, perhaps even a place to raise their young. In the broader context of the *Skulpturenwald*, and the IBA Emscher Park more broadly, it gestures to a future in which not only the ecosystem of the post-industrial landscape, but also the physical remains of mining infrastructure can support (possibly endangered) birds of prey.



Figure 3.9: *Spiralberg mit Himmelstreppe* by Herman Prigann in the *Skulpturenwald Rheinelbe*. Photo: Author, 2018.

Not far from the *Bergmannssäulen* lies the foot of the *Spiralberg*, which Prigann worked on between 1998 and 1999. Paths lead continuously from the *Skulpturenwald* to the base of the *Spiralberg*, such that the visitor's ascent along any one of the three convergent paths that gradually encircle the "mountain" emulates a scaled-down trek from a low-lying forest, up across the tree line, past an alpine pond full of cattails and tadpoles, and finally a steeper climb to the

summit. Finally, a flight of stairs leads to Prigann's *Himmelstreppe*, a twelve-meter, eighteen-ton stack of thirty-five concrete slabs taken from a demolished mine. From the base of this sculpture, visitors can see a variety of Ruhr highlights: the headframes of Zeche Zollverein and the Bergbaumuseum in Bochum (which was never a mine, but took its headframe from a nearby mine that was demolished), the Gasometer Oberhausen, and Christ's *Tetraeder*. Of course, a pair of binoculars or a telescopic lens will help the visitor to differentiate between gray-blue shapes on the horizon, as long as the weather complies. The view is significantly less impressive than from the top platform of the *Tetraeder*, and there are no panels to help the visitor identify the visible landmarks.

Just as the “natural” gradually overtakes the “industrial” in the *Skulpturenwald*, so too does the *Spiralberg* slowly extinguish the fires within the Halde Rheinelbe. This is in part a necessity of public health and safety, as is the case with any remediation project, cultural or otherwise. In the context of the *Skulpturenwald* and the post-industrial landscape of the Ruhr, however, the concealment of a subterranean waste fire replaces one form of ongoing transformation with a different one. Any images of past industry that the poems of the *Bergmannssäulen* may evoke in the readers' minds contrast sharply with their surroundings. Due to Rheinelbe's early closure, demolition, and beginnings of ecological succession, some of the ruinous structures that might be expected in industrial brownfields are generally absent from the site. Prigann's sculptures and the few remains of the Rheinelbe mine stand to remind the visitor that they still find themselves in a post-industrial landscape, and not just a conventional greenbelt.

When we examine the post-industrial landscape aesthetics of Prigann's *Skulpturenwald* through the lens of the four elements, earth stands out as especially prominent in the visitor's

experience. On the most immediate level, those who play in the dirt and climb on the stone and concrete sculptures have a haptic, physically engaging connection to the site. This is central to the forms of experiencing the site that Forester Balke encourages, as well as to those that bothered Prigann so much. On an ecological level, the combination of earth and water provides the basis for the non-human life that visitors encounter: amphibians, birds, invertebrates, and diverse flora all flourish on-site, despite the contamination of the soil. This aspect of the elemental makeup is most closely tied to Prigann's ecological aesthetics and to the Böhmes' understanding of the recurrence of the four elements within today's ecological sciences. What seems to be absent from the site is fire: no light installation draws remote viewers' eyes to the *Himmelstreppe* at night, and there is little to no electronic media that could be tied to the kinds of energy and information transfer that the Böhmes point to as the latest iterations of fire. However, Prigann incorporated ritual bonfires in the inauguration of the site, and thereby brought a different set of associations with fire to the site, as I shall discuss below.

In his works prior to the *Skulpturenwald*, Prigann often attributed memorial significance to the element of fire. The first of the artworks in Prigann's "*Feuertürme – Brandstätte*" sequence were *Der duftende Meiler* (Vienna, 1985), a wooden charcoal kiln that smoldered for five weeks between the Burgtheater and the Rathaus, and *Die Pyramide* ("The Pyramid," Vienna, 1985), which Prigann ignited as a bonfire on the Donauinsel.¹⁶⁶ Prigann continued working with fire through *Feuerlinie* ("Fire Line," 1991), a long row of bonfires that he lit along the bottom of a decommissioned strip mine in Cottbus as part of the Europe-Biennale Lower Lusatia. In his rationale for the piece, Prigann connected archaeological discoveries (German strip mining often involves archaeological sampling of cleared land prior to excavation), memory, fire, energy, warning signs, and celebration:

¹⁶⁶ Prigann, Strelow, and David, pp. 26.

Neolithische Funde weisen auf alte Besiedlung - diese Kulturen hatten als Zentrum ihres sozialen und kulturellen Lebens das Feuer = Die "Brennwerke" beziehen sich in ihrer Form (Zeit) auf jene Zeit, das Feuer selbst trägt die Erinnerung zeitlos in sich. Braunkohleabbau ist Bereitstellung von Energieträgern, diese werden durch Feuer zur Energie - diese Energie ist Basis unserer Zivilisation - diese Zivilisation manifestiert sich in linearen Strukturen = "Feuerlinie." In dieser "Feuerlinie," ihrer raschen Verdränglichkeit ist der Verweis auf die Begrenztheit unserer Zivilisation enthalten und gemeint. Auch der Hinweis auf die Notfeuer alter Zeit, die entfacht wurden, wenn Gefahr in Verzug war. Feuer ist auch Freudenfeuer, Anlaß zur Gemeinschaft, ist das Verbrennen des Alten und Zeichen zum Aufbruch in eine neue Zeit.¹⁶⁷

Prigann's multivalent associations with fire can be extended into his post-industrial land art in general. The timeless form of memory that he ascribes to fire in *Feuerlinie* also apply to his sculptures and the ruins in the *Skulpturenwald Rheinelbe*; this memory, I would add, is both vicarious and imaginary, in the sense that fire cannot literally carry memory across time.

Furthermore, the tensions between concepts such as *Notfeuer* and *Freudenfeuer* can be seen in the tensions between creating memento mori as warning signs of the limits and dangers of industry, and creating spaces for nature-based recreation. It is important to note, however, that unlike the fires from Prigann's *Feuerlinie*, whose lifespan closely matched that of the artwork itself, the bonfires that Prigann lit in celebration of the opening of the *Spiralberg* were markers (of the breakthrough into a new post-industrial era, perhaps) for a much shorter time than the *Skulpturenwald Rheinelbe*. Because memorial aspects of this site remain, the element of fire cannot be the sole data medium.

In addition to Prigann's interpretations of fire, more destructive forms of catalysis can also serve memory functions. The bomb fragment embedded in one of the sculptures attests to the Allied bombing of the Ruhr in World War II. This inclusion serves as an implicit reminder of that destruction, and of the dangers of industrialized warfare in general. However, fire itself remains invisible at the *Skulpturenwald*, hidden deep beneath the *Spiralberg*. Its absence can likewise be read as a cautionary note, in this case not about war, but about rapid consumption of

¹⁶⁷ Prigann, Herman. "Feuerlinie" *Kunstszene Tagebau. Dokumentation eines ungewöhnlichen Kunstereignisses*. Heinrich Schierz, editor. Cottbus: Förderverein Kulturlandschaft Niederlausitz e.V., 1991, pp. 81.

fossil fuels. In this sense, deindustrialization can be read as “burning out.” In the anthropocene, air, water, and earth bear the traces of fire’s exuberant but relatively brief lifespan, in the form of pollution and climate change.

In the case of the *Skulpturenwald*, we can see that fire as the element of memory becomes replaced by earth, whether in the form of the gravel that literally smothers the smoldering reminders of industrial waste dumping practices, or in the form of the *Bergmannssäulen* that combine poetry and the material remains of mining and metallurgy. If, as in the cases of the *Tetraeder* and Prigann’s *Feueraktionen*, fire has memorial properties, and if, as in the Böhmes’ understanding, fire is associated with media and technology, then the replacement of fire with earth parallels the shift from memory media (such photography and videos, as had originally been proposed for the *Haldenereignis Emscherblick*) to immediate, embodied experiences grounded in the material reality of the post-industrial landscape.

Lake Goitzsche

In contrast to the Ruhr, where anthracite (*Steinkohle*) mining required the excavation of deep shafts and tunnels, the central German lignite (*Braunkohle*) mining landscape was shaped by shallow strip mines. The veins of lignite found throughout Saxony-Anhalt and around Leipzig lie under only twenty-five to forty-five meters of sand and clay. Because of this, underground mining (*Untertagebau*) would be impractical, and opencast or strip mining (*Tagebau*) prevails. The mining tips typical of the Ruhr landscape do not appear in the case of strip mining: instead of collecting waste stone in mountainous piles, operators of a strip mine will simply redistribute unusable earth into sections of the mine where the lignite has already been extracted. Due to the missing volume of coal, the surface of the resulting area lies below its original elevation.

Additionally, the life-supporting soil removed in the first step of preparing the strip mine is not replaced, which means that ecological succession must take place through a series of generations of pioneer species that gradually render the terrain hospitable to wider varieties of organisms. Further ecological impacts of strip mining stem from lowered groundwater levels, achieved via pumping in order to dry out and stabilize the mine, and from acidification and other contamination of any water that is allowed to collect in decommissioned mines.

Although the extraction of lignite coal around Bitterfeld had taken place since the end of the eighteenth century, the three strip mines that would collectively become Lake Goitzsche began excavation in 1908, 1949, and 1985.¹⁶⁸ By the end of lignite mining in the early nineties, these mines covered 6,359 hectares of former farms, forests, and villages. Paupitzsch, Niemegk, Döbern, and Seelhausen were completely eradicated from the map; between 1953 and 1992, a total of 4,423 people were relocated, usually to Plattenbau communities in Bitterfeld.¹⁶⁹ In addition to the demolition of these villages and the resettlement of their inhabitants, the expansion of the mines required extensive changes to the local environment: the course of the Mulde river was redirected in a process that took place between 1967 and 1975.¹⁷⁰ During the reign of the GDR, exhausted strip mines were left open, flooded, or repurposed as dumping grounds for industrial waste.¹⁷¹ With German Reunification and the privatization of formerly *volkseigene* industries, the remediation of exhausted and newly decommissioned strip mines became the responsibility of two mining companies that, by 1995, were consolidated into the *Lausitzer- und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH* (LMBV).

¹⁶⁸ Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH. *Landschaften im Wandel. Bergbaufolgeseeen in Mitteldeutschland*. Senftenberg: LMBV Unternehmenskommunikation, May 2011, pp. 12

¹⁶⁹ Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH. *01. Goitzsche/Holzweißig/Muldenstein. Series: Wandlungen und Perspektiven. Mitteldeutsches Braunkohlenrevier*. Senftenberg: LMBV Unternehmenskommunikation, December 2017, pp. 18-19.

¹⁷⁰ Lenz, pp. 173. See also: LMBV 2017, pp. 16.

¹⁷¹ Ibid., pp. 179. This was the fate of sites such as Grube Johannes, which was colloquially referred to as the “Silbersee” for the reflective sheen imparted by refuse from the film factories in Wolfen

An involved process of flooding the mines became standard practice: in order to prevent deadly and destructive landslides, the slopes of the future shorelines would be made shallower before flooding began. The regrading of the embankments was achieved through the use of the same types of excavators that had previously extracted lignite, often operated by the same miners. Once the pit was deemed stable, the groundwater pumps would be shut off, and water from a nearby source would be channeled slowly into the mine. In the case of the Goitzsche, the preparation stage lasted from 1991 to 1999; the flooding stage, which had been planned to take place over a decade, was greatly accelerated by the flood of 2002.

Christ's and Prigann's works in the Goitzsche mine arose as parts of the EXPO 2000 Korrespondenzregion Sachsen-Anhalt (EXPO 2000). This program, which arose through collaboration between leadership of the IBA Emscher Park and the Bauhaus Dessau's Industrial Garden Realm, included a "Kulturlandschaft Goitzsche" initiative that, like its analogues in the Ruhr, introduced elements of art and culture to the prevailing practices of ecological remediation.¹⁷² Among the other artworks that were commissioned for the mine were installations, such as: a small labyrinth; floating islands of stones from the mine, sorted by color; larger-than-life metal guardians of local childrens' illustrations, carved into stone; miniature hills and mining tips, inspired by the forms of sand in the mine; and an ear-shaped amphitheatre for music and other events, entitled *Die AGORA*.¹⁷³ Of these, Christ's *Pegelturm* and the *AGORA* have withstood the test of time; the latter is even the site of "Sputnik Spring Break," an annual popular music festival that brings about 25,000 visitors (who in turn bring overwhelming traffic congestion and over 100 tons of litter), and "Goitzsche-Fest," a much smaller, local music

¹⁷² See the first chapter of this dissertation for more information on the cooperation between the IBA Emscher Park and the EXPO 2000 Correspondence Region Saxony-Anhalt.

¹⁷³ See: Schierz, Heinrich. *Land Gewinnen: Die Goitzsche - Das weltweit größte Landschaftskunstprojekt; Katalog zum Projekt und zur Ausstellung Kulturlandschaft Goitzsche*. Halle (Saale): Mitteldeutscher Verlag, 2000. See also: Schierz, Heinrich. *Aufbruch zu neuen Ufern: Die Goitzsche, 62 Quadratkilometer Bergbaufolgelandschaft bei Bitterfeld. Das weltweit größte Landschaftskunstprojekt*. Halle an der Saale: Stekovics, 2001.

festival run by the Bitterfeld-based band, Goitzsche Front.¹⁷⁴ The remaining artworks, however, have not aged as well.

In addition to their installations in the Goitzsche post-industrial landscape, these two creators worked to articulate the goals and means of the *Kulturlandschaft Goitzsche* as members of the EXPO's art commission. Prigann developed the position paper "Kunst in der Landschaft" (1996), in which he combined aesthetic principles from the IBA Emscher Park, with passages copied from the IBA Emscher Park's "Positionspapier Baukultur und Kunst," and his own ecological aesthetics.¹⁷⁵ Christ drafted what he called an "Ufervertrag" (1996/1997), in which he set forth the terms under which the local community would take on the stewardship of the resulting landscape.¹⁷⁶ Headlines from the regional newspaper, the *Mitteldeutsche Zeitung* (MZ), attest to a gradual loss of interest in the landscape art, however.¹⁷⁷ This was in part due to poor signage and stewardship; the latter was in turn a result of uncertain ownership of and responsibility for the artworks. Nevertheless, a group of local citizens and staff from the EXPO

¹⁷⁴ The *Mitteldeutsche Zeitung*'s coverage of these events, their attendance, and their byproducts is fairly repetitive from year to year.

¹⁷⁵ Prigann, Herman. "Kunst in der Landschaft." 23 October 1996. L 32, Nr. S 7. EXPO 2000 Papers. Landesarchiv Sachsen-Anhalt, Magdeburg, Saxony-Anhalt.

¹⁷⁶ Among the main points of the "Ufervertrag" were several acknowledgements: that all lignite mining districts throughout the former GDR feature the same fundamental landscape, for which the only remediation strategy is flooding, followed by development for tourism and recreation; that other such regions have greater population density, and proportionally greater chances of successful transition to a tourism-based economy; and that the development of the Goitzsche post-mining landscape would take decades. In spite of these challenges, the document proposed, the Goitzsche offered a unique potential in the form of a special "contradictory fascination," and that this potential could be harnessed by local cooperation among the contract's signers, respect for the natural process of ecological succession, preservation of historical traces, and the integration of art in the otherwise purely technical and ecological process of mine remediation. See: "Ufervertrag über die gemeinsame Entwicklung einer neuen Kulturlandschaft für das 21. Jahrhundert in der Bergbaufolgelandschaft Goitzsche." Schierz 2000, pp. 187- 191. See also: "Positionspapier Kulturlandschaft Goitzsche." Ibid., pp. 168-175.

¹⁷⁷ The *Mitteldeutsche Zeitung*'s most bleak headline pertaining to the *Kulturlandschaft Goitzsche*'s artworks came in 2014, in a brief article about the site's decay: "Die Kunstwerke, die erinnern sollten an das, was einst hier war, sind geschaffen für die Vergänglichkeit. Sie sind Wind und Wetter und Erosion ausgesetzt - das ist von den Künstlern so gewollt. Doch sind sie auch mutwilliger Zerstörung und allgemeiner Gleichgültigkeit ausgesetzt - und das ist von den Künstlern nicht gewollt. Immerhin - und auch das darf man nicht unbeachtet lassen: Sie waren Bund und Land Millionen wert." Krüger, Christine. "Landschaftskunst in der Goitzsche: Vernachlässigt und unverstanden." *Mitteldeutsche Zeitung*. Halle (Saale): Mediengruppe Mitteldeutsche Zeitung GmbH, 22 April 2014. Web.

2000 advocates for the artwork as parts of a local cultural attraction, at least until the dissolution of their forum by the end of 2018.¹⁷⁸

Water Gauge Tower and Lake Bridge

Today, Christ's *Pegelturm mit Seebrücke* (2000) floats on the surface of Lake Goitzsche, accessible from a sandy beach east of Bitterfeld via a 200-meter pontoon bridge. As a waterfront destination, the Pegelturm is conveniently located on a small strip of public beach near restaurants, cafés, shops selling ice cream and souvenirs, and a marina. A parking lot simplifies access for the visitors who arrive by car, and the paved road that follows the shore connects bicyclists and pedestrians to Bitterfeld and the towns around Lake Goitzsche. The tower is visible from the corner of the *Villa am Bernsteinsee*—once a nineteenth-century industrialist's villa, now a hotel and restaurant named after the amber collected as a byproduct of lignite mining in the Goitzsche—to the tip of the Pouch peninsula.

In addition to the multiple road and path signs that show visitors the direction and distance to the tower, large blue placards describe the tower and list the other sites of the *Kulturlandschaft Goitzsche*. Those who read the *Pegelturm*'s sign will learn that around a century earlier, the site was a flood-prone forest called the “Goitzsche,” and that mining extracted over 508 million tons of lignite coal, demolished four villages, and devastated sixty square kilometers. The sign also informs visitors of the tower's symbolic function within the landscape:

Direkt vor uns - in der Bucht zwischen Flutungsbauwerk und der Bitterfelder Wasserfront ragt der Pegelturm, gefördert durch Sponsoringmittel der Kreissparkasse Bitterfeld und mit Mitteln des Landes Sachsen-Anhalt, als Symbol einer neuen Landschaft hervor.

The symbolic aspect of Christ's design for the *Pegelturm* was not limited to the panorama it

¹⁷⁸ Färber, Christine. “Vergängliche Kunst: Förderverein Goitzsche löst sich Ende 2018 auf.” *Mitteldeutsche Zeitung*, Halle (Saale): Mediengruppe Mitteldeutsche Zeitung GmbH, 3 March 2018.

offers of the transformed post-industrial landscape, but to mark that transformation as well. Prior to the flooding of the Goitzsche strip mine, the pontoon bridge and the tower rested upon the floor of the mine, and the tip of the twenty-six-meter tower marked the future water level. The flooding would complete Christ's design, after which point the tower would stand as a gauge of the lake's depth.¹⁷⁹ As with the *Haldenereignis Emscherblick*, the *Pegelturm*'s intended landmark status is spelled out in the signage, in this case at the foot of the tower itself:

Als Wahrzeichen der Kulturlandschaft Goitzsche steigt der 26 Meter hohe Pegelturm mit der Flutung in die Höhe und ragt über den See hinaus. Über 144 Stufen gelangen zu einer Plattform von welcher aus sich ein einmaliger Blick auf die gesamte Landschaft erschliesst.¹⁸⁰

I will discuss the view from the *Pegelturm* below, but at this point it must be noted that the *Pegelturm*'s ability to function as a widely-visible landmark is extremely limited in comparison to the *Tetraeder*. Because the *Pegelturm* stands only twenty-six meters above the surface of the lake, the floating tower is not easily visible from the far banks of Lake Goitzsche, beyond the Pouch Peninsula, or from the opposite side of the trees that line the bicycle path that circumnavigates the lake.

¹⁷⁹ When floods hit central Europe in 2002, the planned date of completion had to be moved forward, and the height of the waters is marked with a horizontal line on the sign.

¹⁸⁰ This sign continues, noting the sum that the KreisSparkasse contributed to the *Pegelturm*'s construction.



Figure 3.10: Wolfgang Christ's *Der Pegelturm mit Seebrücke*. Photo: Author, 2018.

After crossing the pontoon bridge, the visitor ascends one of two spiral staircases that wind a double-helix around the tower's hollow core. These stairs are enclosed within a metal safety net, which allows the visitor's view to sweep across the lake as they climb the tower's winding stairs. At the top, the visitor can enjoy panoramic views with sight axes to local points of interest, including the 13th-century Red Tower of Pouch, the "Bitterfeld Mountain," where the *Bitterfelder Bogen* has stood since 2006. As in the case of the *Tetraeder*, the quality of the panorama from the top of the *Pegelturm* is dependent upon the weather. In contrast to Christ's Ruhr landmark, however, the *Pegelturm*'s height and geographic situation limits its visual potential. The tower's height, which reflects the depth of the lake at the point at which it floats, is less than half of the *Tetraeder*'s height. Because Lake Goitzsche resulted from the flooding of

decommissioned strip mines in a generally flat terrain, the surface upon which the *Pegelturm* floats is one of the lowest elevations in the region. As a result, the two bodies that occupy the vast majority of the visual field atop the tower are the lake and the sky.



Figure 3.11: View from the *Pegelturm* toward Bitterfeld, with Biermannsche Villa, marina, restaurants, and pirate tour ship in foreground, *Bitterfelder Bogen* visible in the background. Photo: Author, 2018.

As with the *Tetraeder*, the form of the *Pegelturm* offers an additional layer of signification in association with the element of water. Its helical design recalls that of Archimedes' screw, a form of pump still in use today for irrigation and drainage. The Greek polymath's hydrological achievements also included the formulation of Archimedes' principle, which equates the buoyant force exerted upon a floating object, such as the *Pegelturm mit der Seebrücke*, to the weight of the volume of fluid displaced by the object. The prevalence of floodplains and riparian forests has defined the region's terrain, and the development of techniques to control floods was integrated into garden design in Fürst Franz' Wörlitz Garden Realm.¹⁸¹ In this landscape context, the remediation practice of flooding strip mines becomes

¹⁸¹ Among the flood protection measures in Fürst Franz' historic Garden Realm is a so-called "Proteus-Stein" ("Proteus Stone") as a reminder atop an artificial hill. The stone carries a warning: "Höret, Nachkommen, eine euch warnende Stimme, Vorsichtiger Fleiß schuf diese Hügel und dieses Gebüsch, um die feldbewahrenden Dämme vor dem zerstörenden Eise zu bewahren. Wendet alles an, sie zu erhalten." Küster, Hansjörg, and Ansgar Hoppe. *Das Gartenreich Dessau-Wörlitz. Landschaft und Geschichte*. München, CH Beck, 2010, pp. 171.

more than just a matter of practicality, and gains a degree of cultural resonance that the *Pegelturm* attempts to symbolize. This stands in contrast to Weisshaar's walks and gardens of the previous chapter, which drew attention to the transitory landscape of a decommissioned strip mine prior to its flooding, with temporary activities, artworks, and performances.

The Vanished River

Prigann's project for the *Kulturlandschaft Goitzsche* followed the concepts of another EXPO 2000 project alternately entitled *Muldeumleitung und -rückverlegung* ("Mulde Rerouting and Relocation") and *Wiederherstellung der Durchgängigkeit der Mulde* ("Restoration of the Flow of the Mulde"). The project would have restored the path of the Mulde river, which had been altered to clear the way for mining, but was abandoned due to its sheer impracticality.¹⁸² Instead Prigann realized the idea in a symbolic form in his land art installation for the *Kulturlandschaft Goitzsche*. Prigann conceived of *Der verschwundene Fluss — Die Erdwelle* (1998-99) as an associative reconstruction of the historic path of the Mulde river through the Goitzsche strip mine.¹⁸³

At western end of the "river," stacked concrete slabs that Prigann found in local abandoned industrial sites formed a broad staircase leading down into a trough. From there, *Die Erdwelle* undulated along a linear path, almost two kilometers long by 20-25 meters wide, gently rising and falling in a sinusoidal curve.¹⁸⁴ The ground's surface was stripped in the process of forming the earthworks, such that the bare sand stood in contrast to the light tan grasses and vegetation that covered the surrounding soil. To the existing plant life, Prigann added reeds and

¹⁸² L 22 Nr. 183. EXPO 2000 Papers. Landesarchiv Sachsen-Anhalt, Magdeburg, Saxony-Anhalt.

¹⁸³ Prigann, Strelow, and David, pp. 148.

¹⁸⁴ Prigann, Herman. "Der verschwundene Fluss. Reminiszenz an den alten Muldelauf." In: Schierz 2000, pp. 111-116.

flowering bushes including sea buckthorn, barberry, privet, broom, oleaster, dogwood, and roses.¹⁸⁵ Large stones from the mine crowned the peaks of the waveform, and tall concrete posts lined its path where the waters of Lake Goitzsche would one day cover the project.



Figure 3.12: Herman Prigann's *Der verschwundene Fluss*, with posts still visible on the near shore. Photo: Author, 2018.

With *Der verschwundene Fluss*, Prigann took the concepts of disappearance and overgrowth to their logical conclusion. While the title refers to the Mulde River, the piece itself has almost completely disappeared since its completion. Near the parking lot of the Pouch peninsula, several signs and maps provide information about the nearby landscape, its history, and its land-art installations. The *Landschaftspark Goitzsche* sign, which repeats the information

¹⁸⁵ Ibid., pp. 115-116.

about the Goitzsche mine that appears on the analogous sign for the *Pegelturm*, maps out the land-art projects of the Pouch peninsula and lists Prigann's artwork as "Der verlorene Fluss," albeit without naming any of the artists. The sign offers no further information than the site's approximate location, marked with a large dot.

A more extensive sign put up by the *Gartenträume*, a network of historically important parks and gardens throughout Saxony-Anhalt founded in 2000, lists the individual land-art pieces (including artists' names) on the Pouch peninsula. This sign offers slightly more extensive information than the *Landschaftspark Goitzsche* signs, and even notes that *Der verschwundene Fluss* was intended as a "Reminiszenz an den ehemaligen Muldenverlauf." Prigann's artwork appears on the map as a path of dots leading into the lake, but the start of the path appears on the wrong side of the bend in the road that leads by it. This sign is already outdated, however: as of October 2017, the *Gartenträume* had struck the *Landschaftspark Goitzsche* from its list, on account of the poor state of the sites artworks after years of neglect, vandalism, and decay.¹⁸⁶

Between *Der verschwundene Fluss* and the Red Tower of Pouch, a much older old sign posted by the LMBV around the time of the *Kulturlandschaft Goitzsche* lists a series of safety warnings and shows a map of the peninsula and the art projects. Since the sign's installation, the separate color layers of the map have peeled apart, making it impossible for the visitor to locate Prigann's piece. At the southeast corner of the Pouch peninsula, where the paved road that circumnavigates the lake meets the foot-worn trail that crosses the path of *Der verschwundene Fluss*, a small stone hidden in the grass bears a bleached placard that shows in faded pink the word "Rundwanderweg," hints of arrows, and the logo of the EXPO 2000 Correspondence Region Saxony-Anhalt. Perhaps the stone once pointed in the direction of Prigann's artwork, but

¹⁸⁶ "Rückschlag für Tourismusregion: Goitzsche-Landschaftspark ist kein 'Gartentraum' mehr." *Mitteldeutsche Zeitung*, Halle (Saale): Mediengruppe Mitteldeutsche Zeitung GmbH, 13 October 2017.

if so, that is no longer the case.

With the lack of signage and the inaccuracy of the few signs' maps, *Der verschwundene Fluss* remains lost to any visitor who neither knows what to look for, nor has time to seek it. This lack can be explained in part by the relative density of different projects around the lake, and on the Pouch peninsula in particular: installing a detailed sign explaining each installation would have amounted to unnecessary expenditures. In the case of *Der verschwundene Fluss*, however, the facts that no images of the original site appear on any of the signage, and that no obvious and easily-accessible traces remain, mean that it recedes into obscurity.¹⁸⁷ The posts that were to mark the path of *Der verschwundene Fluss* beyond the shore of the future lake can still be seen, provided that the visitor is looking from a high enough position to spot them beyond the line of trees. As with other aspects of the piece, it helps to know what to look for in the first place. With the prevalence of bare masts, piers, and other assorted posts that jut out of the water around the lake, it is easy to dismiss the posts that are part of Prigann's artwork as insignificant. The one place from which *Der verschwundene Fluss* might be visible in its entirety is the Red Tower of Pouch. Unfortunately, the tower was been closed for repairs between 2016 and August 2018; panoramas taken from the top of the tower that can be found online show little sign of the work through the surrounding foliage.

¹⁸⁷ The artwork's state of inaccessibility and unrecognizability had been the case since at least 2008, according to a report from the *Mitteldeutsche Zeitung* that documented similar problems with most of the other artworks of the *Kulturlandschaft Goitzsche* as well. See: "Die Mär der Kunstlandschaft." *Mitteldeutsche Zeitung*, Halle (Saale): Mediengruppe Mitteldeutsche Zeitung GmbH, 27 May 2017.



Figure 3.13: Visitors walking past large rocks at the opening of Prigann's *Der verschwundene Fluss*. Photo: Author, 2018.

Visitors who explore this area may note a group of pale tan boulders that stand out from thick shrubbery, tall grass, and trees. These boulders are part of Prigann's design, and they originally stood out dramatically in the barren mine landscape. However, to say that this vegetation hides the artwork would be inaccurate: many of the bushes and trees were planted alongside the stones as part of the installation. The plants that are part of *Der verschwundene Fluss* differ slightly in hue, form, and height from the surrounding vegetation that has either grown spontaneously, or has been planted along the side of the nearby roads. The artificiality of the “natural” elements of Prigann's artwork is therefore visible, if subtle.

Despite the overgrowth and underrepresentation of *Der verschwundene Fluss*, some visitors find their way to the part of the artwork most easily recognizable as art: the steps. In order to reach these, the visitor must leave the foot-worn path where it crosses the swath of boulders, and head inland between two particularly prominent boulders. Depending on the

season of one's visit, this venture is best undertaken with sturdy footwear and sufficient leg coverage, such that scrapes are minimized and any ticks that might be hiding in the uncut grass and thick shrubbery do not find their way to one's skin. As the visitor treads deeper into the foliage, the bushes on both sides converge, almost to form a wall. But from the seam between the branches, a single concrete slab emerges—and then another overlapping it—and again, until the steps emerge.



Figure 3.14: The steps of Prigann's *Der verschwundene Fluss*. Photo: Author, 2018.

The steps themselves remain in their original positions, as vegetation has not yet grown roots and trunks strong enough to push them apart. Traces of human activity in the environment can be seen: a solitary Ur-Krostitzer bottle cap on the steps proves that some visitors still come

there, at least to enjoy a beer in seclusion; piles of trash in a depression hidden among the boulders and tall grass “downstream” attest to much more flagrant waste disposal practices.

The elemental dynamics at play in *Der verschwundene Fluss* echo many of the aspects I have identified in the other three projects in this chapter, but with an emphasis on forgetting, rather than remembering. To an even greater extent than at the *Skulpturenwald Rheinelbe*, the combined elements of earth and water have overtaken Prigann’s artistic intentions. With the addition of the site’s ruination, *Der verschwundene Fluss* has become anything but the kind of attraction that the *Skulpturenwald* offers. At best, it lives on in the memories of those who visited it after completion, but before the flooding, and it continues to provide an extremely secluded space for those who still visit it with beer in tow. In a sense, however, Prigann’s land art was attuned to and an active participant in its own obscurity. All other projects of the *Kulturlandschaft Goitzsche* were sanguine about the potential for land art to contribute significantly to the cultural transformation of the former mine. The attrition of public interest in all projects but Christ’s Pegelturm and the ear-shaped AGORA amphitheatre, where the Pouch peninsula’s music festivals take place, attest to the failure of a vision that was not shared by artists, residents, the private sector, and government, even if early tourist numbers once supported the premise that Lake Goitzsche’s land art could make it a popular destination.

As a “reminiscence of the former path of the Mulde,” Prigann’s artwork has an explicitly memorial purpose, and yet by its very design, *Der verschwundene Fluss* disappears from memory. This echoes the dynamics of “countermonuments”¹⁸⁸ or “Gegendenkmäler” that have been designed to vanish, such as Jochen Gerz and Esther Shalev-Gerz’ *Monument Against*

¹⁸⁸ In the context of German Holocaust memorials in the 1990s, James Young writes: “But perhaps no single emblem better represents the conflicted, self- abnegating motives for memory in Germany today than the vanishing monument.” Young, James E. “The Counter-Monument: Memory against Itself in Germany Today.” *Critical Inquiry*, vol. 18, no 2, Chicago: University of Chicago Press, Winter 1992, pp. 267-296.

Fascism in Harburg, a suburb of Hamburg. With the twelve-meter lead tower that was periodically lowered into the ground, the public was invited to interact with the monument by writing their names on it.¹⁸⁹ While the memory cultures and scholarly discourses surrounding counter-monuments generally pertains to memorials to the victims of the Holocaust, *Der verschwundene Fluss* can be understood as a counter-monument to the environmental damage and human displacement wrought by local strip mining.

Der verschwundene Fluss must also be read in the context of land art, particularly with respect to Robert Smithson's 1970s land art projects, including *Spiral Jetty* (Great Salt Lake, Utah, 1970), *Broken Circle / Spiral Hill* (Emmen, Holland 1971), and *Amarillo Ramp* (Amarillo, Texas, 1973), as well as Smithson's unrealized *Land Reclamation* projects in quarries and mines.¹⁹⁰ On the surface, several of Prigann's projects appear to echo Smithson: the *Gelbe Rampe* (Cottbus, Germany, 1993), featured a ramp, though linear and covered in yellow-blooming vegetation; the *Spiralberg* in the Ruhr is larger and more complex in form and function than *Spiral Hill*, and yet the fundamental shape remains the same; *Der verschwundene Fluss* traces a curve into water, like *Spiral Jetty* and *Broken Circle*; and Prigann had his own unrealized plans for a larger-scale *Terra Nova* project, that would reclaim German strip mines for land art purposes. A more fundamental connection between Prigann's and Smithson's later works, however, is their relationships to the surrounding, often post-industrial environment, and climate.¹⁹¹ In particular, the disappearing act of *Der verschwundene Fluss* resembles the

¹⁸⁹ See Young, pp. 271.

¹⁹⁰ See Chapter 2 for further discussion of Smithson's *Land Reclamation* projects in the context of Bertram Weisshaar's staged walks and transitory gardens in the Golpa North strip mine. For more information, see: Schmidt, Eva, Judith Frey, and Robert Smithson. *Robert Smithson: Die Erfindung der Landschaft. The Invention of Landscape: Broken Circle/Spiral Hill & Film*. Köln: Snoeck, 2012.

¹⁹¹ Prigann also developed aesthetic concepts, such as "sculptural places" and "metamorphic objects," that remix, expand, and diverge from Smithson's thoughts on entropy and non-sites. See: Prigann, Strelow, and David; Maskit; and Miles, Malcolm. *Eco-aesthetics: Art, Literature and Architecture in a Period of Climate Change*. New York: Bloomsbury Academic, 2014.

submersion of *Spiral Jetty*, with the exception that the former disappears through the combined action of industrial remediation and ecological succession, while the former *reappears* as a result of annually shifting water levels and anthropogenic climate change.¹⁹²

The futility of making a land art installation that would disappear seems in retrospect to be a sober critique of the *Kulturlandschaft Goitzsche*'s attempt to stimulate sustainable progress in the region through art. Here, Prigann's work is entirely subject to the obfuscating forces of nature and of human industry—or its attempts to clean up after itself. Half of Prigann's work at Lake Goitzsche succumbed to the LMBV's planned flooding—plus the subsequent, unplanned flooding in 2002; the other half disappeared beneath the vegetation that Prigann had planted. As a result, Prigann's artwork effectively effaced itself before the local public could allow it to fall into disrepair through neglect. Whereas the obsolete “Gartenträume” sign still stands as a reminder of the peninsula's one-time prestige, and whereas the LMBV's peeling warning sign and map seems to make the remaining artworks seem all the more dated, the disappearance of *Der verschwundene Fluss* seems to increase its mystery as a lost, archaeological site.

Conclusion

Throughout the four examples I have examined in this chapter, a curious tension has formed between the two creators' works. While Christ and Prigann were not in direct dialogue, their common influences from the Böhmes and their common involvement in both the IBA Emscher Park and the EXPO 2000 make the contrasts between their designs even starker. The relationship between Christ's towers and Prigann's land art recalls Georg Simmel's 1907 essay

¹⁹² On the reemergence of *Spiral Jetty*, see, for example: Julavitz, Heidi. “The Art at the End of the World: A pilgrimage (with children) to see “Spiral Jetty,” Robert Smithson's profound testament to catastrophe.” *The New York Times*, New York: H. J. Raymond & Co., 7 July 2017; and Wang, Angela. “As the Great Salt Lake Dries Up, “Spiral Jetty” May Be Marooned.” *Hyperallergic*, New York: Hyperallergic Media, 7 February 2017.

“Die Ruine,” in that the upward-striving principle of mind or spirit is countered by the downward-tending weight of natural force, to create the harmony of the ruin.¹⁹³ In this case however, the post-industrial landscape aesthetic does not arise out of such a dynamic dialectic, but somehow relaxes to include opposing concepts, without falling apart. Some constants can be identified: in both Christ’s landmark architecture and Prigann’s land art installations, signage guides the interested visitor to learn about the sites’ histories, contexts, and interpretive possibilities; both offer the visitor an embodied experience that is immediately grounded in the material terrain of sites shaped by mining; and adventurous climbing recurs as a mode of experiencing these sites, whether the visitor must struggle to overcome their fear of heights to reach the top of the *Tetraeder*, or dares to scale the *Himmelstreppe*.

Beyond the matter of physical motion, however, the ways in which these sites work differs greatly between the two creators. Christ’s towers are meant to be seen and seen from; they elevate the visitor from the ground, so that they may visually comprehend the surrounding post-industrial landscape and its networks of other landmarks. By partaking in these panoramas, the visitor may contemplate other historical markers in the distance, or the transformation of the surrounding post-industrial landscape, but only to the extent that the weather—the elements and atmosphere—permits. On the other hand, the sites by Prigann that I have examined here seem to entail much more haptic experiences of those same landscapes, in which the visitor either dirties their hands or bodies while climbing or sliding, or suffers minor scrapes from sneaking through overgrown vegetation. Of course, most of the other senses are active, too: while it would be unusual to taste contaminated soil, it is possible that bathers swimming in Lake Goitzsche learn the flavor of the water; in summer, the sounds of insects, frogs, and birdsong seldom cease; and

¹⁹³ Simmel, Georg. "Die Ruine." *Philosophische Kultur: Gesammelte Essays*, Leipzig: W. Klinkhardt, 1911, pp. 125-33.

across these sites, the smells of the air, earth, and water are free of the smoke and ash of industry.

In addition to affecting the visitor's immediate perceptions of hot and cold, wet and dry, however, the elements of air, earth, fire, and water play unique roles in the material and associative characteristics of the post-industrial landscape. As an agent of change, air acts through weathering and atmospheric oxidation, and thereby not only creates the aesthetic effects of patina and rust that have fascinated ruins theorists from Alois Riegl and Georg Simmel to Edensor and beyond, but contributes to the structural ruination of former industrial sites through erosion and corrosion. At the most literal level, it encompasses the materials coal, stone, soil, and sand that have been moved and shaped in the processes of mining, remediation, and the post-industrial redesign into landscape art and architecture. Landscapes of mining tips and strip mines, legacies of contaminated soil, and even sinkholes, tremors, and other unintentional motions of earth that result from mining may be included here. As contaminated soil and ground stripped of life-sustaining humus, earth not only bears witness to the chemical and physical legacies of mining, but also to the resilience of pioneer vegetation that thrives in these otherwise inhospitable environments. Fire is the more immediately obvious element of change: flashy, transitory, and catalytic. Its material presence in the post-industrial landscape is limited to subterranean fires and industrial holdouts, such as Prosper Coking Plant. It is seen in the light art that reminds nighttime spectators of the existence of post-industrial landscape installations, as well as in the bright lights and high energy of music concerts. Interpreted as electricity, media, or information, fire furthermore gives access to virtual modes of enjoyment and remembering. In contrast to fire's memorial implications, water has much more of an amnesiac effect in the post-industrial landscape of Lake Goitzsche and other flooded lignite mining landscapes in the new German states. The physical potential of water to transform landscape is made manifest through

gradual changes in groundwater levels, eons of shifting river meanders, and cataclysmic flooding. The cleansing of waters, the restoration of groundwater levels, the rerouting of waterways are just a few of the ways in which water is a crucial element for the transformation of post-industrial landscapes. Such flooding literally covers up the evidence of mining. Visitors can play and swim in the waters of Lake Goitzsche, completely unaware of the mining landscape it conceals, much less of the artworks that once marked the transformation of that landscape.

CHAPTER IV

Bundesgartenschau Gelsenkirchen 1997 and Nordsternpark

Post-Modern Tensions in Post-Industrial Landscape Aesthetics

“Eigentlich hatte ich immer davon geträumt, daß diese Bundesgartenschau endlich einmal eine andere wird. ~~Diesen Traum habe ich Stück für Stück aufgegeben.~~ ¹⁹⁴”

Karl Ganser to Klaus Bussfeld, 26 June 1995

With three years of planning down and two remaining until Germany’s first Federal Garden Show to take place on a former industrial site, the project’s leader had already lost hope that the event would differ from previous such shows. Karl Ganser nearly expressed this in a strongly-worded letter to Klaus Bussfeld, Gelsenkirchen’s city manager, about the Bundesgartenschau Gelsenkirchen 1997 (hereafter BUGA ’97).¹⁹⁵ Ganser critiqued the programming concept, which entirely omitted the fact that the future Nordsternpark, named for the Nordstern coal mine that it repurposed, demonstrated major innovations in post-mining land reclamation and landscape architecture, industrial heritage conservation, and avant-garde art. Instead, the proposed events focused on themes such as “Mothers’ Day,” “Rose Week,” “Italian Night,” and “Valentine’s Bouquet.”¹⁹⁶ In response to this, Ganser admonished that

¹⁹⁴ “I had always dreamed that this Federal Garden Show would be different [from the others]. ~~I have abandoned this dream piece by piece.~~” Strike through in original. Ganser, Karl. Letter to Klaus Bussfeld, 26 June 1995. Internationale Bauausstellung Emscher Park Papers, 230A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

¹⁹⁵ As cited in the epigraph above, Ganser’s draft features a meandering line that strikes through the sentence “Diesen Traum habe ich Stück für Stück aufgegeben.” Whether Ganser had a change of heart, or simply thought better of including a statement of his lack of confidence in the project, Bussfeld never learned that Ganser had abandoned this dream.

¹⁹⁶ Bundesgartenschau Gelsenkirchen 1997 GmbH. Sachstandsbericht Veranstaltungen/ Öffentlichkeitsarbeit. 18

Nordsternpark, a “sensational park” formed from a difficult landscape through hard work, deserved better programming than the “usual banalities”:

Es ist uns bei Nordstern in harter Arbeit wohl gelungen, aus einer schwierigen Landschaft und [sic] einen sicher aufseherregenden Park zu gestalten. Dieser hätte nun eigentlich auch ein Programm verdient, das zumindestens etwas aus den üblichen Banalitäten herausführt.¹⁹⁷

Ganser’s letter to Bussfeld reveals a perceived conflict between the ambitions to present the BUGA ’97 as an achievement in post-industrial landscape design, and to make the event appeal to a wide audience through generic programming. As an urban planning professional invested in the reclamation of former industrial sites, Ganser advocated for the idea that visitors would appreciate the aesthetic qualities of these spaces without the additional incentive of unrelated attractions.¹⁹⁸ On the other hand, the programming concept reflected a serious concern that the public’s tastes and expectations of the garden show genre would first have to be met, if people were to purchase tickets to begin with. Ganser’s tone, his self-censored confession of having abandoned his dreams for the BUGA ’97, and his choice to use the word “banalities” suggests that he saw these two goals as incommensurable.¹⁹⁹ I will argue, however, that far from being a matter of mutually exclusive aims, this tension was and remains a fundamental aspect of post-

August 1995. AfsB 230B. Bussfeld’s invitation and the attached invitation were archived separately. The August 1995 copy shows a general lack of emphasis on the reconstruction of the landscape, which suggests that the earlier version had the same, or less.

¹⁹⁷ Ganser, Karl. Letter to Klaus Bussfeld, 26 June 1995. IBA Emscher Park. 812B. AfsB

¹⁹⁸ Throughout the whole process, Ganser had repeatedly emphasized the need to distinguish the BUGA ’97 from prior Federal Garden Shows by foregrounding the site’s transformation from a coal mine to a landscape park. In a 1990 letter to Bussfeld, Ganser had already written that a demonstration of the reconstruction of (the post-industrial) landscape, which could have its own “unusual aesthetic appeals,” would go down well with the public: “Man muß mit einer derartigen Konzeption nicht zwangsläufig in den Vorwurf hineinlaufen, man würde eine “Bundes-Unkrautschau” veranstalten. Eine ehrliche Demonstration des Wiederaufbaus von Landschaft, die durchaus ihre ungewöhnlichen ästhetischen Reize haben kann, kommt beim Publikum nach meiner Auffassung an.” Ganser, Karl. Letter to Klaus Bussfeld, 4 October 1990. AfsB 812B. Ganser lifted the “Bundes-Unkrautschau” slight from a critical report on the Frankfurt Bundesgartenschau 1989, a Federal garden show whose financial and popular failure gave Ganser an object lesson in how not to plan such an event.

¹⁹⁹ There were, however, additional grounds for Ganser’s exacerbated tone. Ganser wrote the letter in response to Bussfeld’s invitation to a hastily-arranged meeting for local politicians and organizers of the BUGA ’97. The 10 AM appointment was scheduled without taking Ganser’s plans into account, which included a 2 PM presentation in Berlin. Furthermore, Ganser had previously anticipated needing that morning to recovery from the celebration of Ganser’s wife’s fiftieth birthday the previous evening. See: Ganser, Karl. Letter to Klaus Bussfeld, 26 June 1995. Internationale Bauausstellung Emscher Park Papers, 230A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

industrial landscape aesthetics. In this chapter, I will analyze how this and other tensions that run throughout the music, art, architecture, and landscape of the site create multivalent experiences for the visitor. In order to do so, I will turn to Charles Jencks' theories of post-modern architecture, which offer a framework in which to account for and reconcile apparent contradictions such as "new/old," "elite/popular," "accommodating/subversive," and "natural/industrial."



Figure 4.1: Central buildings of Zeche Nordstern (1926-27, 1930), as designed by Fritz Schupp and Martin Kremmer, with Schupp's later addition, the Nordsternurm (1951), in the background, with 2010 addition and the back of Markus Lüpertz' *Herkules von Gelsenkirchen* (2010). Photo: Author, 2018.

Post-Modern Architecture and Post-Industrial Landscape Aesthetics

Part of the challenge of analyzing post-industrial landscape aesthetics lies in the difficulty of developing clear and concise terminology with which to discuss a category that consists of a wide and often contradictory variety of artistic, architectural, natural, and historical elements.

Jonathan Maskit offers the term “interesting” to account for the ambivalent appeal of land art in former industrial sites. In an article on postindustrial environmental aesthetics of Robert Smithson, Richard Serra, Peter Latz, and Herman Prigann, Maskit introduces this category in order “to capture what captivates us in conceptual art in general and conceptual, environmental art in particular.”²⁰⁰ He gives a preliminary account of “the interesting” in terms of its “different modalities,” of its proximity to the Kantian sublime, and of its ability to provoke ambivalent responses:

While a full elucidation of the interesting cannot be undertaken here, we can say that it appears in different modalities. The particular modality of the interesting that applies to the postindustrial has perhaps greater similarity with the sublime than the beautiful. For Kant tells us that the sublime both attracts and repels us. And so too with sites such as these. We find ourselves simultaneously awed and disgusted; impressed and depressed. The power of technological culture to transform nature is made manifest here in its starkest form. And yet, we do not turn away. We both rue what is no more and are smitten by what is.²⁰¹

Although I will not adopt Maskit’s terminology here, I agree that these sites are indeed interesting, and that part of their interest value comes from how they can encompass a large number of binary opposites at once.²⁰² Part of what I find interesting (in the colloquial sense) about the BUGA ’97 and Nordsternpark is that the organizers and artists who were involved attempted to address as wide an audience as possible, while at the same time trying to communicate the unique value of this landscape and its preservation, all of which led to the creation of a particularly multivalent site. Rather than attempt to articulate another new category with which to analyze this, I will instead turn to Charles Jencks’ concepts of post-modern

²⁰⁰ Maskit, pp. 324-325.

²⁰¹ Ibid., pp. 331-332. Maskit is right to point out the similarity of his “interesting” to the Kantian sublime, but he is not alone in doing so. The sublime appears in several other analyses of post-industrial aesthetics, such as Tim Edensor’s *Industrial Ruins: Space, Aesthetics and Materiality* (2005), Steven High and David Lewis’ *Corporate Wasteland: The Landscape and Memory of Deindustrialization* (2007).

²⁰² My decision not to use Maskit’s term has several grounds. First, it does not account for the possibility that people might not find these sites and projects interesting. Maskit’s scholarly engagement with Prigann’s *Der verschwundene Fluss* on the Pouch Peninsula of Lake Goitzsche does not reflect the severely neglected state of the site in the mid- to late-2000s when Maskit published his article. Second, “interesting” does not specify the audience, who might be interested, or how different audiences might respond differently to the same instance of “the interesting.” I will explore this issue in the current chapter. Third, Maskit’s “interesting” conflicts with Kant’s “Interesse,” which would complicate an in-depth discussion of the aesthetic implications of this terminology.

architecture.²⁰³ By discussing the ways in which his theories overlap with post-industrial landscape aesthetics, I aim to shed light not only on the nature of this aesthetic, but also on its place within broader architectural and artistic contexts.

Jencks' theories of post-modern architecture describe a series of principles that can also be observed in the examples of the BUGA '97 and Nordsternpark, albeit with important differences. To be clear, the projects and the site that I examine in this chapter are not themselves instances of such architecture: the examples that I will discuss include a song, an art and sound installation in a historic, modernist coal building, and the landscaping of the park itself, all of which were created in the late 1990s, when Jencks had already acknowledged a decline in the post-modern movement.²⁰⁴ Nevertheless, what remains relevant here is the concept of "double coding" that Jencks coined in order to discuss post-modern architecture's aim to communicate both with the public and with a select few at the same time. He writes:

Today I would still partly define Post-Modernism as I did in 1978 as *double coding: the combination of Modern techniques with something else (usually traditional building) in order for architecture to communicate with the public and a concerned minority, usually other architects*. The point of this double coding was itself double. Modern architecture had failed to remain credible partly because it did not communicate effectively with its ultimate users - the main argument of my book *The Language of Post-Modern Architecture* - and partly because it did not make effective links with the city and history.²⁰⁵

The intent behind double-coding can also be seen in the BUGA '97's tension between appealing to the general audiences of prior Federal Garden Shows, as well as to those concerned with the

²⁰³ Theories of the post-modern are too numerous and diverse to address thoroughly in the context of this chapter. Jencks' ideas are the most relevant to the BUGA '97 and Nordsternpark, as I will detail below, and so I will engage exclusively with his interpretations. Incidentally, however, Jencks may have been the only major theorist of post-modernism to have also designed a landscape park in a former open-cast coal mine, namely the Fife Earth Project on the site of the Scottish St. Ninians mine. The plans were never realized, but are outlined, with a brief comparison to the IBA Fürst-Pückler-Land, in: Jencks, Charles. *The Universe in the Landscape: Landforms*. London: Frances Lincoln, 2011.

²⁰⁴ By 1987, Jencks had already written of post-modern architecture succumbing to over-production and "kitsch" as a result of its own success; by 1991, he noted that the movement had lost direction and been subverted by commercial interests in "the late 1980s as it became successful, middle-aged, part of the Establishment and taught in the academies." See: Jencks, Charles. *The Language of Post-Modern Architecture*. 6th Edition. New York: Rizzoli, 1991.

²⁰⁵ Original emphasis. Jencks, Charles. *Critical Modernism: Where is Post-Modernism Going?* Chichester: Wiley-Academy, 2007, pp. 51-52.

environmental, historical, and aesthetic particularities of the post-industrial landscape. But Jencks notes that these kinds of goals lie at cross purposes, and offers the term “radical schizophrenia” to describe the ambivalent strategy of post-modern architecture and to refine his definition of double coding:

Thus the schizophrenic solution I defined as post-modern: an architecture that is professionally based *and* popular, as well as one that is based on new techniques *and* old patterns. To simplify: double coding means elite/popular, accommodating/subversive and new/old.²⁰⁶

The ways in which Jencks’ theories of post-modern architecture apply to post-industrial landscape aesthetics extends beyond the dual intentions of “double-coding” and “radical schizophrenia,” and I will explore this point in greater detail throughout my discussions of the case studies in this chapter, but for now I will focus on the particular relevance that the three binaries of elite/popular, accommodating/subversive, and new/old have for the BUGA ’97 and Nordsternpark.

Ganser’s letter to Bussfeld illustrates how the tension between elite and popular that Jencks identifies as part of post-modern double-coding in architecture is expressed in the planning of the BUGA ’97. In this example, Ganser’s personal investment in post-industrial landscape aesthetics as an urban planning professional comes into conflict with the proposal to host events with generic, widely-recognized themes. This is analogous to the problem that Jencks argues post-modern architecture aims to solve, namely by developing techniques of double-coding in order “to communicate with the public and a concerned minority.”²⁰⁷ What the resulting products look like may differ between architecture and the repurposing of the Nordstern

²⁰⁶ Ibid., pp. 52. Elsewhere, Jencks elaborates on the approach that he calls “radical schizophrenia,” describing it as a way to address local traditions and culture at the same time as state-of-the-art architecture: “The architect should be trained as a radical schizophrenic (everything must be radical today), always looking two ways with equal clarity: towards the traditional slow-changing codes and particular ethnic meanings of a neighborhood, and towards the fast-changing codes of architectural fashion and professionalism.” Jencks, Charles. “Post-Modern Architecture.” *Architecture Theory Since 1968*. Hays, K. M., editor. Cambridge, Mass: The MIT Press, 1998, pp. 308-316.

²⁰⁷ Jencks 2007, pp. 52.

mine, but the fundamental approaches that Jencks describes apply in both cases.

In the tension between accommodating and subversive, the concrete details of what “double-coding” and “radical schizophrenia” entail begin to emerge, both in post-modern architecture and in post-industrial landscape aesthetics. The proposed programming turned to established cultural conventions that are widely recognized and practiced, such as Mothers’ Day, while Ganser insisted on foregrounding the achievement of transforming the Nordstern Mine into a park. The former seeks to accommodate a general audience and to attract as many visitors as possible, and the latter aims to subvert traditional conceptions of industry as a counterpoint to nature, culture, beauty, and recreation. Here, what I understand to be subversive about Ganser’s approach is influenced by Jencks’ claim that post-modern architecture is “evolutionary, not revolutionary.”²⁰⁸ In this sense, the goals of post-industrial landscape aesthetics are not to shock the audience or to cause a violent change in perspective, but rather to introduce the visitor to the aesthetic appeals and ultimately to the cultural and environmental values of the post-industrial landscape.²⁰⁹

Jencks’ inclusion of “new/old” as one of the binaries within double-coding has specific meanings within the context of architecture, but the tension itself is inherent to post-industrial landscape aesthetics in general and to the BUGA ’97 and Nordsternpark in particular.

Throughout *The Language of Post-Modern Architecture*, Jencks finds examples of buildings that combine structural and decorative references to traditional and historic styles with contemporary fashions and innovative techniques. He argues that these examples demonstrate a co-presence of past, present, and future that is part of post-modern double-coding. In post-industrial landscape aesthetics, this kind of temporal layering is inherent to the material remains of the industrial site

²⁰⁸ Jencks 1991, pp. 96.

²⁰⁹ Here I agree with Maskit that these forms of landscape intervention “transform how we see postindustrial sites.” Maskit, pp. 324.

in question, and the design of a given intervention determines which layers are legible, and how. Thus, instead of incorporating elements of the old in the creation of a completely new building as a post-modern architect might, the creators of the projects that I examine in this chapter reference diverse aspects of local history in their work to reinterpret and repurpose the site for future use.

In this chapter, I will analyze how these tensions play out in specific examples from the BUGA '97 and Nordsternpark today. By doing so, I will reveal ways in which these projects created multivalent and at times contradictory meanings. Additionally, I will continue to develop an understanding of the uniquely post-industrial tension that runs throughout the projects that I study in this dissertation, namely the tension between the natural and the industrial.

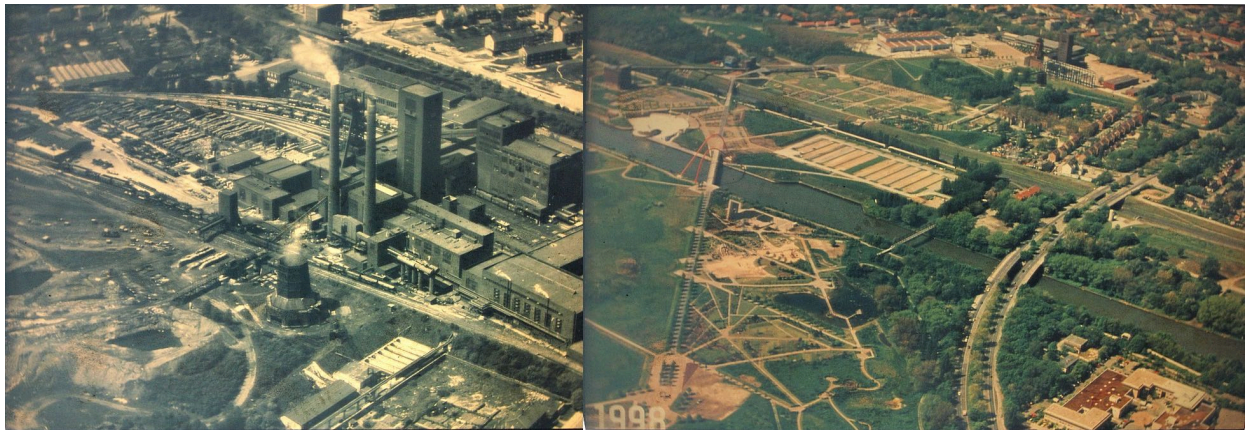


Figure 4.2: Aerial photographs of Zeche Nordstern (left, 1989) and the Nordsternpark grounds (right, 1998) from the *Wandel is immer* exhibit in the Nordstern tower.

Bundesgartenschauen: Background

As a widely-recognized institution in Germany with a long history of establishing new parks in unused urban spaces, the Federal Garden Show was an advantageous tool for the IBA Emscher Park's goals. The choice to host the BUGA '97 on the grounds of the Nordstern Mine in Gelsenkirchen brought the BUGA legacy of urban beautification and ecological renewal to bear on deindustrialization. The BUGA '97 was the first major IBA project for Gelsenkirchen, which

would later see the construction of the *Wissenschaftspark Gelsenkirchen* and the *Skulpturenwald Rheinelbe*. Both the BUGA '97 and the Wissenschaftspark aimed to contribute to the city's economic revival, while ecological renewal was the common thread between BUGA '97 and the *Skulpturenwald Rheinelbe*. As one of Germany's most economically challenged cities, Gelsenkirchen stood to gain in the short- and long-term from the BUGA '97, were it to be successful.²¹⁰ Not only would the event itself bring visitors to the city, the renovation of the Nordstern buildings and surrounding area would provide office and residential spaces.²¹¹

These horticultural shows originated in nineteenth-century expositions, in which scientific displays of plants from colonial or other environments met the growing commercial fields of industrialized floristry and gardening, as well as the latest fashions. The specific incarnation of the biennial Federal Garden Show that included the BUGA '97, and continues today, began in West Germany in 1951.²¹² Each of these shows involve either the creation of a new park or the expansion and improvement of an existing park, and a duration of six months,

²¹⁰ In 1991, Gelsenkirchen had the eighth lowest per capita GDP of eleven Ruhr urban districts, beating only the smaller districts of Hamm, Bottrop, and Herne. By 2016 it rose to seventh, as a result of Oberhausen falling behind. Throughout this period, Gelsenkirchen remained below the mean average across the Ruhr metropolitan region, which in turn fell below North-Rhine Westphalia. See: "Bruttoinlandsprodukt zu Marktpreisen." Arbeitskreis Volkswirtschaftliche Gesamtrechnungen der Länder, Landesamt für Information und Technik. Wiesbaden: Statistische Ämter des Bundes und der Länder, 2018; and "Bevölkerungsstand und -fortschreibung." Regionalstatistik Ruhr. Düsseldorf: Landesbetrieb für Information und Technik NRW, 2016. Between 1990 and 2015, Gelsenkirchen had an unemployment rate above eleven percent, peaking in 2005 at twenty-one percent. Despite fluctuations, Gelsenkirchen's unemployment rate always exceeded that of North Rhine-Westphalia. See: *Zahlen und Fakten zur Wirtschaft*. Münster: Industrie- und Handelskammer Nord Westfalen, May 2016, pp. 68. Along with Herne and Duisburg, Gelsenkirchen has the lowest purchasing power in North-Rhine Westphalia. See: *Regionalwirtschaftliche Profile Nordrhein-Westfalen 2018. Metropole Ruhr. Ausgewählte Indikatoren - Herbstupdate*. Düsseldorf: NRW.BANK.Research, October 2018.

²¹¹ As of March 2017, around 1,300 jobs are now held in office spaces created through this renovation, which have a capacity of up to 2,000 positions. *Der Nordsternpark. Freizeit, Erholung, Kultur und Arbeiten im Landschaftspark am Wasser*. Gelsenkirchen: Stadt Gelsenkirchen, Der Oberbürgermeister, April 2017, pp. 43.

²¹² Garden and botanical exhibitions of the nineteenth century focused on the display of exotic plants, as a result of the combination of the botanical "discoveries" of colonial exploration, and the demand for flowers and information about them on a growing commercial scale. The shows of the early twentieth century often foregrounded gardens and the relationship between them and housing; however, the growing number and thematic diversity of local and regional shows, such as "Große Ruhrländische Gartenschauen" (GruGa), make it difficult to identify further trends. Under the NS-Regime, this variety gave way to singular "Reichsgartenschauen," which took place until WWII. Panten, Helga. *Die Bundesgartenschauen: Eine blühende Bilanz seit 1951*. Stuttgart: Eugen Ulmer Verlag, 1987, pp. 8-11.

during which a wide spectrum of competitions, exhibits, and displays of plants and flowers are open to the public, for an entry fee.²¹³ The earliest instances of these postwar shows focused on the reclamation and beautification of urban spaces that had been destroyed during the war, and on the demonstration of German horticultural skills and products.²¹⁴ Subsequent shows continued to have a strong urban planning motivations, but with gradually increasing emphasis on the ecological aspects of park design.²¹⁵

The BUGA '97 was the first of the federal shows to take place on the grounds of a decommissioned industrial site. The mix of gardens and industry found precedents in the three Dortmund BUGAs of 1959, 1969, and 1991, each of which took place on the grounds of the Westfalenpark (founded for the BUGA 59), in the shadows of the Hermannshütte, a steel mill in Dortmund-Hörder that was active between 1879 and 1998.²¹⁶ The mill was still active at the time, and its presence forced the parks's designer to incorporate soot-resistant trees.²¹⁷ But although the mill was clearly visible from the park grounds, its premises remained inaccessible to the general public. Only with the BUGA '97 would there be a Federal Garden Show that reclaimed industrial land for the purpose of public recreation.

In the initial stages of planning the BUGA '97, Essen was the proposed location. By March 1990, the city of Essen withdrew its application for the Bundesgartenschau 1997, on the grounds that the planned sites were not available.²¹⁸ Instead, the city of Gelsenkirchen and the

²¹³ Starting in 1953, the BUGA would be replaced every ten years by an International Garden Show (Internationale Gartenbauausstellung, or IGA). Ibid., pp. 11.

²¹⁴ Vagt, Kristina. *Politik durch die Blume. Gartenbauausstellungen in Hamburg und Erfurt im Kalten Krieg (1950-1974)*. München: Dölling und Galitz, 2013, pp. 71-75.

²¹⁵ Panten, passim.

²¹⁶ PHOENIX Dortmund "Bewegt – Die Historie von PHOENIX. Von der Hermannshütte zum Zukunftsstandort PHOENIX." Dortmund: Wirtschaftsförderung Dortmund, 2015. Web.

²¹⁷ Panten, pp. 36-41.

²¹⁸ Ganser, Karl. "Vermerk. Internationale Bundesgartenschau 1997." 29 March 1990. Internationale Bauausstellung Emscher Park Papers, 439A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

IBA Emscher Park jointly proposed to situate the event at the neighboring Nordstern mine. The owners of the site, Ruhrkohle AG and the VEBA-Kraftwerke Ruhr, abandoned their publicly-contested plans to turn the grounds of the coal mine into a waste incineration plant and began cooperating with the BUGA '97 organizers.²¹⁹

Zeche Nordstern (“North Star Mine”), whose name refers to the fact that it was the northernmost coal mine in the Ruhr at the time of its opening, was active between 1986 and 1993.²²⁰ Its most prominent buildings were designed in 1926-1927 and 1930 by Fritz Schupp (1896-1974) and Martin Kremmer (1884-1945), German architects who began working together in Essen in 1922.²²¹ Only one year after commencing work on Zeche Nordstern, Schupp and Kremmer would begin to design their most famous work, Shaft XII of Zeche Zollverein in Essen. The Zollverein complex often receives the distinction of “world’s most beautiful coal mine,” and in 2001 joined the ranks of UNESCO World Heritage Sites. Even though Zeche Nordstern has not received the same degree of recognition, its architecture displays the clear signature of Schupp and Kremmer’s modern functionalism. In 1951, Schupp designed the headframe tower of Nordstern Shaft II, and thereby completed the mine’s most iconic structure. Throughout the process of remediating the site for the BUGA '97, several buildings including Schupp and Kremmer’s coking plant were razed, leaving only the Nordstern mine itself, several administrative offices, and the coal mixing and bunker complex.

²¹⁹ Voss, Gerd. “Auf dem Weg zur weltweit grünen Industrieregion. Zauberwort Gartenschau fegt das Giftmüll-Projekt davon.” *Ruhr-Nachrichten*, Gelsenkirchen, 26 April 1990. Internationale Bauausstellung Emscher Park Papers, 439A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum. After the confirmation that Gelsenkirchen would host the BUGA '97, the VEBA-Kraftwerke Ruhr began to plan the construction of the “world’s most modern” power plant on property adjacent to the site, to be unveiled for the BUGA '97. This plan was delayed, and ultimately abandoned. See: Ganser, Karl. “VERMERK Kraftwerk Heßler” 19 March 1994. Internationale Bauausstellung Emscher Park Papers, 204B. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

²²⁰ Berke, Wolfgang. *Auf Zeche: Entdecken, Erleben, Erinnern: Der Reiseführer zu mehr als 100 Standorten im Ruhrgebiet*. 2. Auflage. Essen: Klartext, 2016. P 88-92.

²²¹ Bott, Markus, and Markus Dietz. “Zeche Nordstern: Aufstockung Schacht II.” *Stahlbau*, vol. 81, no. 1, Berlin: W. Ernst & Sohn, 2012, pp. 63-69. See also: Brockhaus, Christoph, and Hans U. Humpert, editors. *Kunstklangraum: Zeche Nordstern*. Ostfildern: Cantz, 1997, pp. 160-161.



Figure 4.3: Photos of Heino singing “Blühendes Land” at the grand opening of the BUGA ‘97. Left: *Der Nordsternpark. Freizeit, Erholung, Kultur und Arbeiten im Landschaftspark am Wasser*. Stadt Gelsenkirchen, Der Oberbürgermeister, April 2017. Right: “Die BUGA 1997. Ein Landschaftspark entsteht.” Gelsenkirchen.de.

Heino, “Blühendes Land”

On a gray Saturday, April 19, 1997, an audience filed into the four thousand seats of the newly-constructed floating amphitheatre in Nordsternpark to celebrate the grand opening of the BUGA ‘97’s 170-day season.²²² The pop-folk singer Heino took to the stage wearing a lime-green blazer and his signature blackout sunglasses, and delivered a live rendition of “Blühendes Land” (“Blossoming Land”), a song that the Bundesgartenschau had commissioned for the occasion.²²³ Dancers in flower costumes, and some in simple white shirts and black trousers, surrounded Heino as he strummed his guitar and sang of tradition, the future, and love for Gelsenkirchen and the Ruhr.

The decision to have Heino compose a song for the BUGA 97 and sing it at the opening

²²² Guests of honor included North-Rhine Westphalian minister-president Johannes Rau, Federal president Roman Herzog, the Gelsenkirchen soccer team FC Schalke 04, and for some reason, an Austrian soap opera star (of the long-running German show *Lindenstraße*) and a Russian chess master as well. *Der Nordsternpark. Freizeit, Erholung, Kultur und Arbeiten im Landschaftspark am Wasser*. Stadt Gelsenkirchen, Der Oberbürgermeister. April 2017.

²²³ The words “blühendes Land,” which in this case the Ruhr region undergoing transformation from a rust-belt to a metropolitan area interwoven with greenbelts, echoes Chancellor Helmut Kohl’s 1990 concept of “blooming landscapes” that would become of the new German states in the wake of reunification. In this context, Gelsenkirchen’s economic troubles seem to be reflected in the parallel to the former GDR, where rapid deindustrialization and privatization of formerly state-owned industries was taking place.

festival was part of the organizers' attempt to appeal to a wide audience.²²⁴ When confronted by a representative from the IBA Emscher Park who questioned Heino's appropriateness for the occasion, BUGA-CEO Rolf Paulin stated that Heino had been chosen because he was the biggest "crowd magnet" at the time.²²⁵ Heino's music crosses several categories of popular German folk music: *Schlagermusik* (popular hits), *volkstümliche Musik* (folk music), and *Heimatlieder* (homeland songs).²²⁶ Heino was a safe choice, even if his music did not seem particularly exciting or appealing to the organizers, because he was well-known and inoffensive. Thus it seems that his inclusion would lean toward the popular, traditional, arguably low-culture ends of the post-modern tensions within the overall context of the BUGA '97's events, art, and landscape. Still, as I will argue below, the song's lyrics involve further tensions that complicate simplistic categorization.

As a *Heimatlied* for a post-industrial landscape, "Blühendes Land" pays homage to the local geography, people, and history, and heralds a new, post-mining era.²²⁷ Heino sets the scene immediately, locating this Heimat in the northern "Revier" (a nickname for the Ruhr region) between the Emscher River and the Münster region, in a time between gray city walls and a

²²⁴ As of 2019, with Heino's final album, *... und tschüss* (2018) released, Heino has sold over fifty million records in Germany, compared to Grönemeyer's seventeen million (a difference that also involves the age difference between the two). By contrast, Grönemeyer's *Mensch* (2002) continues to hold the number one position for sales of a single album within Germany.

²²⁵ Immediately after the meeting in which this choice was announced, the IBA Emscher Park's scientific director for "Landscape" Arno Schmid confronted the Gelsenkirchen mayor Dieter Rauer and BUGA-CEO Rolf Paulin about his discontent with the choice. He opined that any another musician, such as the Göttingen-born but Bochum-raised soft-rock singer Herbert Grönemeyer, would have been more appropriate for the BUGA 97 than "Heino, of all people." Both Rauer and Paulin agreed with Schmid, and Paulin even admitted that he wasn't particularly fond of Heino: "In persönlichen Gesprächen nach der Sitzung habe ich sowohl Herrn Oberbürgermeister Rauer als auch Herrn Paulin darauf angesprochen, daß meines Erachtens ein anderer Interpret (z.B. Gerd [sic!] Grönemeyer) der BUGA '97 GE- eher gerecht würde als ausgerechnet Heino. Beide haben mir beige pflichtet, Herr Paulin gab aber zu verstehen, daß Grönemeyer für diesen Auftritt nicht zu gewinnen gewesen sei, Heino ihm im übrigen auch nicht unbedingt liege, aber zur Zeit der größte Publikumsmagnet sei." "Kurzbericht." Arno Schmid to Karl Ganser on 5 December 1996. AfsB 232B.

²²⁶ While *Schlager* shares the aspects of public appeal and commercial success with English "pop music," it also refers to German-language folk music. This *volkstümliche Musik* harkens to traditional songs and lifestyles, and often concentrates on sentimental and cheerful songs, especially those about *Heimat*, one's homeland.

²²⁷ The studio recording of the song can still be found on Heino's CD-single or streaming on YouTube. See: Heino. *Blühendes Land*. Hamburg: BMG Ariola, 1997. Sound recording.

“new era” characterized by a sea of flowers:

Zwischen Emscherstrand und Münsterland im nördlichen Revier
Bricht eine neue Zeit an, mit einem Blütenmeer
Aus grauen Städtewauern ist längst Vergangenheit
Heut’ zeigt die Heimat, die wir lieben, sich im schönsten Kleid²²⁸

The second word, “Emscherstrand,” defies expectations of a conventionally beautiful Heimat.

Unlike an “untouched” river or beach, which would be consistent with the kind of idyllic imagery typical of the genre, the edge of the former sewer canal was (and still is) an inaccessible, offensive-smelling space with concrete banks and exposed pipes. Even today, as an underground sewer tunnel hides the waste of the region from visitors’ eyes and noses, and rainwater fills the river instead of effluent, the Emscher smells (albeit probably much less than it did in 1997), and it is still fenced off from the public. Some sections of the Emscher have been “renaturalized,” in that the concrete canal bed has been torn out, and a more naturalistic, meandering riverscape has been artificially created, but this is not the case in Nordsternpark. However, in the context of the BUGA ’97 marking a temporal shift to a “new era,” the idea of a blooming “Emscherstrand” could be read as a projection to a future Gelsenkirchen. In this sense, the “old” aspects of Heino’s traditional style comes into productive tension with the “new” sense of Heimat that the BUGA ’97 aimed to create at Nordsternpark.

²²⁸ Ibid.



Figure 4.4: The Emscher River at Nordsternpark, 2018. The pipes on the left come from the pumping station near the coal mixing plant; crossing the river you can see the conveyor bridge, and in the background the single-arch bridge can be seen. Photo: Author, 2018.

The natural aspects of the opening stanza meet the industrial in the chorus. Here, Heino sings about tradition, the sweat and industriousness of fathers, and the Ruhr as the “iron heart of the nation”:

Herz an Herz, Hand in Hand
 In ein blühendes Land
 Aus Zukunft und Tradition
 Wo die Väter mit Schweiß
 Erfanden den Fleiß
 Schlägt das eiserne Herz der Nation²²⁹

On a historical level, the words “iron heart of the nation” refer to the Ruhr as the industrial core of (West-) Germany, which was important to military production in both World Wars and the Cold War, as well as to reconstruction efforts during the German Economic Miracle. On a

²²⁹ Ibid.

cultural level, these words valorize the physical labor of male industrial workers, and connects the local history of metallurgy and machine assembly to a sense of vital emotional importance to the nation. And although this stanza focuses on the past, the future is also present. With the lines that the fathers invented industriousness here, Heino draws near to a post-industrial era, in which innovation and diligence begin to eclipse the economic importance of manufacturing prowess (as well as the extraction and processing of natural resources).

Heino begins the final unique stanza of “Blühendes Land” with ideas of neighborliness and intercultural collaboration. After gesturing toward a sense of community with a rhyming couplet that starts with “Hier” on both lines, he brings the song back to the subject of transformation, and to the specific location of the BUGA ’97:

Hier kennt man seinen Nachbarn noch, egal woher er stammt
Hier schufen viele Völker den Fortschritt Hand in Hand
Es hat sich viel verändert, der Mut wurde belohnt
Weil man in Gelsenkirchen fast schon wie im Grünen wohnt²³⁰

The words “egal woher er stammt” and “viele Völker” point the groups that migrated to the Ruhr area, from Polish migration starting in late 1800s, to the guest worker migrations of the 1950s and 1960s from Italy, Spain, Greece, Turkey, Morocco, Portugal, Tunisia, and Yugoslavia. By incorporating local history and demographics in “Blühendes Land,” Heino partakes in the kind of site-specific consideration of the audience that Jencks identifies in post-modern architecture.²³¹ Here, Heino’s musical genre and lyrics combine to make a song that is popular in style and accommodating to the local public.

With the final line, Heino returns to the concept of a new, green, renaturalized Gelsenkirchen that is on the verge of replacing the old, gray, industrial one. This does not come

²³⁰ Ibid.

²³¹ One of Jencks’ clearest examples of this is Charles Moore’s *Piazza d’Italia* (1976-79) in downtown New Orleans, whose structural and ornamental references to Italian architecture reflect local Italian heritage. Jencks 1991, pp. 118.

as an antagonistic rejection of the past, for tradition, fatherhood, and Heimat are still valuable in “Blühendes Land.” Instead, the change is a reward for the city’s courage. Exactly what courage this is remains unsung and open to interpretation, but in the context of the BUGA ’97’s replacement of the Nordstern mine, it may have to do with the loss of industrial employment. In this sense, I read “Blühendes Land” as a song of encouragement for the region in a time of unsettling change. It promises good things to come in an uplifting tone, and avoids any controversial content or confusing forms that could detract from its message.



Figure 4.5: Photographs of *KunstKlangRaum*. Clockwise from top left: architectural quote from Fritz Schupp, an olive tree emerging from a pile of coal in front of a swath of gold bricks, and ferns placed in coal carts. Brockhaus, Christoph, and Hans U. Humpert. *Kunstklangraum: Zeche Nordstern*. Ostfildern: Cantz, 1997, pp. 120-121.

KunstKlangRaum (ArtSoundSpace)

The most pronounced counterpoint to Heino was the art- and sound- installation *KunstKlangRaum* that was open for the duration of the garden show. The *KunstKlangRaum* offered visitors an opportunity to contemplate the meanings of the end of coal mining in

Gelsenkirchen through active exploration, observation, and listening. While Heino's performance appealed to popular tastes, this collaboration between German electronic musician Hans Ulrich Humpert and Israeli installation and environmental artist Dani Karavan presented visitors with an avant-garde experience.²³² Jencks' concept of radical schizophrenia entails contradictions, and the contrast between Heino's music and Humpert's is part of the post-modern tensions of elite/popular, accommodating/subversive, and natural/industrial within the BUGA '97.

KunstKlangRaum consisted of three parts: Dani Karavan's art installation "Mima'amakim (Aus der Tiefe)" (*Kunst*), Hans Ulrich Humpert's ambient sound composition "Von den Steinen, die brennen" (*Klang*), and the renovation of Nordstern's coal mixing building, coal bunker, and the connecting conveyor bridge (*Raum*). I will briefly introduce these individual works here, before proceeding with more extensive discussions of each in the following sections.

The title of Humpert's part of the *KunstKlangRaum*, the sound installation "Von den Steinen, die brennen," refers to a description of coal's use as fuel in China from *The Travels of Marco Polo*.²³³ In this piece, Humpert creates ambience from layered and digitally processed recordings including traditional miners' songs, minimal jazz music, and readings of Marco Polo's words, as well as sounds from active coal mines. The Marco Polo quotes bring an element of discovery and exploration to the work, which otherwise focuses on the history of mining labor and culture in Gelsenkirchen. Thus, in the context of the BUGA '97, this piece can be seen as an

²³² Here I use the term "avant-garde" in a general sense, to indicate the pioneering and unconventional aspects of Humpert's and Karavan's art. Unlike Peter Bürger, who focuses on avant-garde art and literature of the early twentieth century, I will not analyze *KunstKlangRaum* as part of an art movement that critiques the institution of art. See Bürger, Peter. *Theory of the Avant-Garde*. University of Minnesota Press, Minneapolis, 1984. And in contrast to Renato Poggioli's theory of the avant-garde, I do not believe that *KunstKlangRaum* has a militant, activist, or antagonistic political stance, and it does not play with random chance. See: Poggioli, Renato. *The Theory of the Avant-Garde*. Translated by Gerald Fitzgerald. Cambridge, Massachusetts: Belknap Press, 1968. The tension that Clement Greenberg discusses between avant-garde and kitsch is applicable to the contrast between Heino and Humpert, but Greenberg's writing suggests a hierarchical judgment in favor of high culture over low, whereas Jencks' theory of post-modern architecture acknowledges the value of both. See: Greenberg, Clement. "Avant-Garde and Kitsch" *Clement Greenberg. The Collected Essays and Criticism Volume 1 Perceptions and Judgments 1939-1944*. O'Brian, John, editor. Chicago, University of Chicago Press, 1986, pp. 5-22.

²³³ Brockhaus and Humpert, pp. 44, 149.

opportunity to approach the recent past and local traditions anew, through an auditory, defamiliarized perspective. Of course, Humpert's music does not do this alone, but in conjunction with Karavan's installation art.

The title of Karavan's piece, "Mima'amakim (Aus der Tiefe)," refers to the opening line of Psalm 130, which entails a plea to God for redemption "out of the depths" (Latin: *De profundis*). In *KunstKlangRaum*, Karavan assembled objects and inscriptions that evoked the history of coal in Gelsenkirchen, from its geological formation, through its extraction, to the end of mining. He thereby crossed the titular quote from Psalm 130 with the extraction of coal "out of the depths" of the earth, and imparted the psalm's penitential meaning to *KunstKlangRaum*'s retrospective of mining at Nordstern. Thus, this project extends Karavan's catalogue of memorial works, many of which address the Holocaust, and brings his techniques to bear on the themes of deindustrialization and environmental reclamation.²³⁴

The ways in which Humpert and Karavan combined diverse historical references in *KunstKlangRaum* resonate with Jencks' concepts of "radical eclecticism" and "ad hocism" in post-modern architecture. With these two terms, Jencks aims to describe an approach to incorporating elements taken from diverse sources into a meaningful whole. He writes:

Various parts, styles or sub-systems (existing in a previous context) are used in a new, creative synthesis. Radical eclecticism stresses the aspect that these parts must find a semantic justification; eclecticism in itself is a senseless shuffling of styles, as incoherent as Purism, its opposite. Ad hocism stresses the aspect that these parts must be unified creatively for a specific purpose (the definition of ad hoc).²³⁵

The issues of "semantic justification" and unification that Jencks mentions are crucial to his idea of successful post-modern architecture. Without a clear meaning that justifies the selection of elements ("parts, styles, or sub-systems"), such architecture succumbs to criticism as

²³⁴ In a 1999 letter about a potential reopening of the installation to Christoph Brockhaus, the director of the Wilhelm-Lehmbruck Museum in Duisburg, Karavan wrote the "I consider 'Mimaamakim' as one of my best works of art." Karavan, Dani. Letter to Christoph Brockhaus, 9 April 1999. Internationale Bauausstellung Emscher Park Papers, 1052A. Archiv für soziale Bewegungen, Haus der Geschichte des Ruhrgebiets, Ruhr-Universität Bochum.

²³⁵ Jencks 1998, pp. 310.

“pastiche.”²³⁶ In the context of *KunstKlangRaum*, Humpert’s and Karavan’s diverse historical references find the semantic justification of an avant-garde, associative retrospective of coal at Nordstern. Thus the apparent disconnections between sounds from mines and readings from Marco Polo’s travelogue, and between piles of coal and potted palms, become meaningful as samples from across a three-hundred-million-year history of coal that ends in the BUGA ’97.

The *KunstKlangRaum* was reviewed in the local paper, the *Westdeutsche Allgemeine Zeitung* (WAZ), and promoted in the 1997 Westphalian tour guide. By the end of May, 75,000 visitors had already gone through the space, and by the end of the BUGA ’97, the total reached 350,000.²³⁷ Hans-Jörg Loskill wrote of the physical and intellectual demands of going through the *KunstKlangRaum*, including the challenge of ascending the 170-meter conveyor bridge:

Der Gang durch den früheren Funktionalbau von Schupp/Kremmer birgt eine gewisse physische, psychische und geistige Beanspruchung. Allein die ehemalige Bandbrücke mit ansteigenden 170 Metern will „geschafft werden.”²³⁸

This combination of interpretive and physical challenges makes the metaphor of “working through history” manifest. On one level, the visitor’s progression through the complex echoes that of the coal that was once processed there, and the effort of climbing the conveyor bridge without the assistance of a cart or belt makes the amount of energy required to move tons of coal physically comprehensible on a small scale. On another level, the mental labor of engaging with Humpert’s and Karavan’s art, with its multivalent references, requires the visitor to synthesize multisensory cues with their own memories and associations.

²³⁶ Jencks acknowledges this criticism throughout *The Language of Post-Modern Architecture*, but does not explicitly define pastiche. He does, however, associate the term with compromise and a lack of intentionality. See: Jencks 1991, pp. 73.

²³⁷ Loskill, Hans-Jörg. “Neue Ästhetik für die Ex-Zeche. Begehrter „KunstKlangRaum” auf Nordstern im Gelände der Bundesgartenschau.” *Westdeutsche Allgemeine Zeitung*. Essen: Funke Medien NRW GmbH, 25 May 1997. See also: Muscheid, Michael. “Die Saat ist aufgegangen.” *Westdeutsche Allgemeine Zeitung*, Essen: Funke Medien NRW GmbH, 27 April 2007.

²³⁸ Loskill.

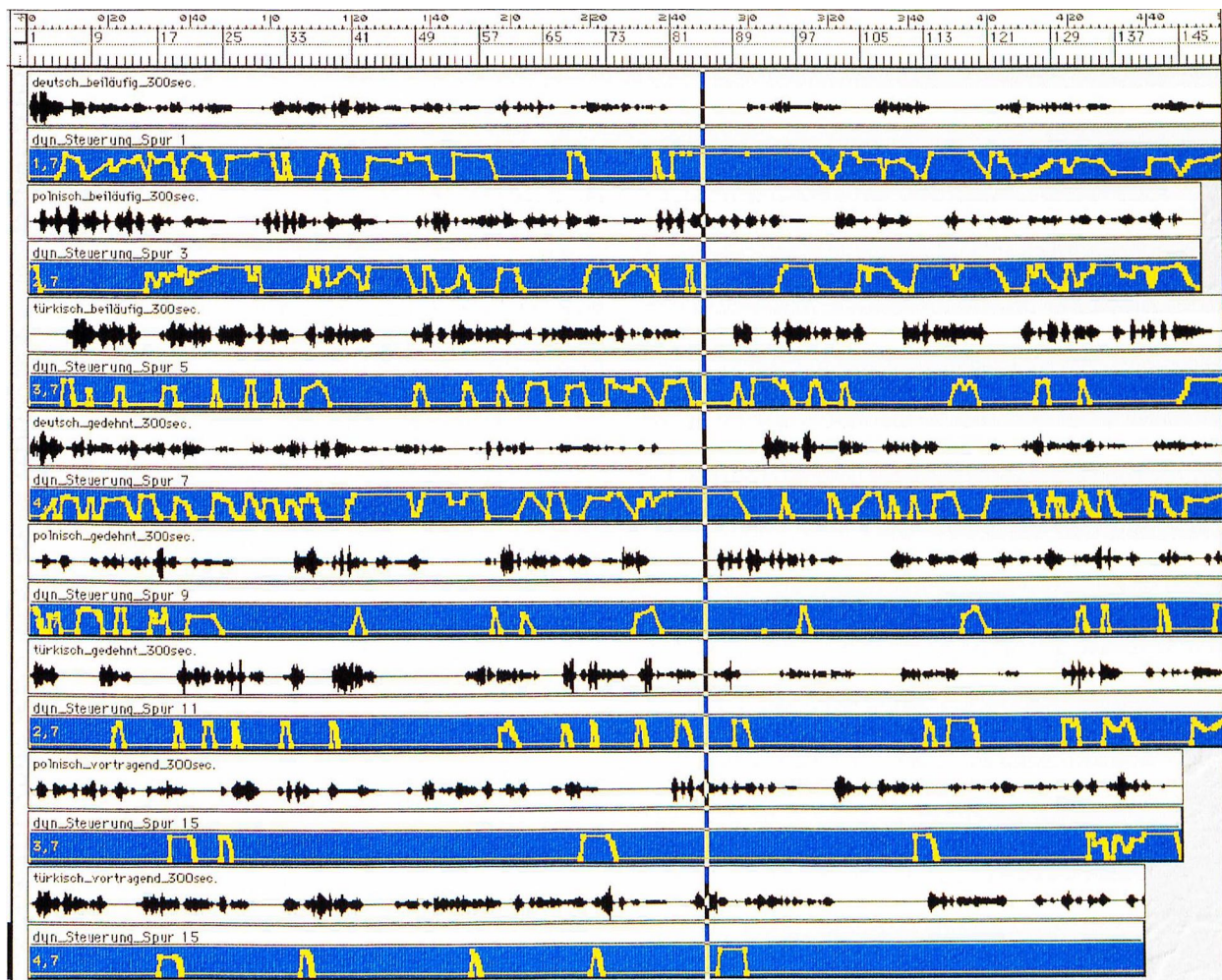


Figure 4.6: Digital representation of Humpert's composition for the conveyor bridge. Shown here: the layered audio recordings of Marco Polo's description of coal in German, Polish, and Turkish, each in triplicate (not all are shown here) as "in passing," "stretched," and "spoken," with the dynamic range of each track shown in blue and yellow. Brockhaus, Christoph, and Hans U. Humpert. *Kunstklangraum: Zeche Nordstern*. Ostfildern: Cantz, 1997, pp. 151.

Hans Ulrich Humpert: "Von den Steinen, die brennen"

Humpert's "Von den Steinen, die brennen" consists of five pieces, each of which was played in a loop on a different floor of the coal mixing and bunker complex. The work spans an hour and fourteen minutes which, in combination with the length of each track, gives a rough suggestion of how long Humpert and Karavan expected visitors to explore the *KunstKlangRaum* and each of its rooms.

The first two pieces, which played in the coal mixing building where visitors entered,

introduced visitors to the ways in which Humpert samples, processes, and layers audio samples of industrial sounds and folk songs. The two tracks have similar structures and selections of source material (and at twelve and eighteen minutes, are of comparable length), so I will discuss them together. The main feature of these soundtracks is a recurring accordion solo, which plays short passages from traditional miners' songs. Most prominent among these is "Das Steigerlied," which has the status of the miners' hymn across Germany.²³⁹ Interspersed between the accordion sections are recordings of a miners' choir singing the same songs, which reinforce the musical references to the local history of mining, and the cultural expressions of that tradition. Rather than playing the choir recordings in their original form, however, Humpert subjects them to varying degrees of temporal dilation while maintaining their original pitch with the help of electronic sound editing. In the background of these more recognizable musical passages, Humpert adds vocal and mechanical noises from active mines.

Humpert's combination of familiar and distorted sounds demonstrates the kind of multivalence that Jencks ascribes to double-coding. To visitors who are only vaguely familiar with German mining traditions, the brief passages from "Das Steigerlied" offer accessible points of reference. This makes the music generally comprehensible as a composition of historical citations, even if the more experimental aspects may be confusing. For former miners, on the other hand, the fragments of workers' dialogue and sounds from within active mines would hold further meaning, and perhaps emotional weight in the form of nostalgia. In both cases, the recognizable sound quotes would be tied to visitors' memories of mining or mining culture in the region. Yet the music also engages visitors who might be interested in avant-garde art, because it presents a complex composition of performed and found sounds, both untouched and heavily

²³⁹ While the *Steigerlied* is common to all mining traditions throughout Germany, it has regional variants that make a Ruhr *Steigerlied* distinguishable from the version sung by miners in the Ore Mountains of Saxony.

distorted. It invites one to contemplate the history of the site and Karavan's installation in terms of binaries: familiar and defamiliarized sounds, recent and distant histories, melancholy remembrance for the passing of coal mining and celebration of a verdant future.

In the seven-minute music for the conveyor bridge, Humpert addressed the resident ethnic groups of Gelsenkirchen with readings in Polish, German, and Turkish from Marco Polo's description of coal being burned in China.²⁴⁰ Similarly to the previous tracks, Humpert plays these recordings over time-dilated versions of themselves. In this case, he takes this stretching to an extreme, such that the background droning is hardly recognizable as speech. His choice of languages reflect the long history of Polish migration to the Ruhr, as well as the comparatively recent history of Turkish migration. Meanwhile, the sounds of pigeons cooing and fluttering their wings accompanies the human voices throughout. This is also a reference to the original wave of Polish migrants, who brought with them the practice of breeding messenger pigeons; since then, this *Taubenzucht* has become a widely-recognized Ruhr tradition. Here, the familiarity of language and practices is offset by the extremely distorted and defamiliarized voices in the background.

When the visitor arrived from the conveyor bridge into the funnels of the coal bunker, Humpert's most unusual music greeted them. Against nine minutes of the constant crackling and low whoosh of a furnace, Humpert plays two percussion tracks that phase in and out of audibility at different rates. One of these is an oddly playful, or perhaps chaotic, mess of erratic chimes that wander across different pitches and rhythms, and which Humpert subjects to further distortion. The other is a low, persistent pounding that almost feels aggressive in contrast to the other. This

²⁴⁰ The German version reads, "Überall findet man hier eine Art von schwarzen Steinen, die tief in der Erde abgebaut werden und wie Scheite brennen, die Hitze aber besser und viel länger halten als Holz. Wenn man sie abends ins Feuer wirft, brennen sie die ganze Nacht und verbreiten in diesem kalten Klima eine angenehme Wärme." Brockhaus and Humpert, pp. 149.

track makes for a much more alienating experience of the industrial, than that which visitors find in the other rooms.

With the final track of “Von den Steinen, die brennen,” Humpert accompanies the visitor’s emergence from the dark, industrial interior of *KunstKlangRaum* out into the bright (weather permitting) panorama atop the coal bunker. At twenty-five minutes, this is the longest of the five songs, which suggests that Humpert expected visitors to spend the most time at this rooftop finale. To emphasize the contrast between interior and exterior, Humpert accompanies jazzy trumpet phrases with birdsong. These passages are interspersed with sounds of cheering from the nearby soccer arena, home of the local team Schalke 04, as well as relatively undistorted passages from the “Steigerlied” (the key miners’ greeting “Glück auf!” is heard loud, clear, and at a normal pace).

Like Heino’s “Blühendes Land,” Humpert’s “Von den Steinen, die brennen” pays homage to the local Heimat and to the passage of the era of active coal mining in Gelsenkirchen. However, Humpert’s work is more challenging to comprehend (in addition to the physical challenge posed by the space), due to its fragmented composition, the disparate sources and materials that he cites, the structural complexity of his composition, and the use of innovative technology to manipulate and compose sounds. It encourages a different, more open-ended mode of contemplating the end of mining in Gelsenkirchen than “Blühendes Land,” which pays tribute in a much more unambiguous way to Gelsenkirchen’s post-industrial landscape and culture. But in order to understand how this fits into the *KunstKlangRaum* as a whole, I now turn to Karavan’s part in the project.



Figure 4.7: Photographs of *KunstKlangRaum*. Brockhaus, Christoph, and Hans U. Humpert. *Kunstklangraum: Zeche Nordstern*. Ostfildern: Cantz, 1997, pp. 122-123.

Dani Karavan: “Mima’amakim (Aus der Tiefe)”

Like Humpert’s music, Karavan’s installation engages with a wide range of materials that pertain to the history of coal and society in Gelsenkirchen, but for the purpose of this chapter I will focus on the elements that involve plant life or Schupp’s industrial architecture.²⁴¹ The prevalence of plant life in “Mimaamakim” also reflects the BUGA ’97’s reclamation of decommissioned industrial infrastructure through the addition of more conventionally beautiful horticulture. Palms in the machinery and the colorful, geometric flowerbeds visible through the windows reflect the artificial nature present here. By contrast, the historically authentic industrial architecture becomes a setting for artistic expression and exploration of the past. The end result combines apparent contradictions between the natural and industrial, old and new.

²⁴¹ This leaves out certain important human elements, such as a wall of portraits of miners, or x-rays of lung disease caused by mining, as well as a series of associative inscriptions that appear throughout the installation.



Figure 4.8: Plant life in and seen from *KunstKlangRaum*. Brockhaus, Christoph, and Hans U. Humpert. *Kunstklangraum: Zeche Nordstern*. Ostfildern: Cantz, 1997, pp. 118-136.

Karavan's use of plants in the installation represented both the formation of coal from carboniferous-period precursors to today's ferns, and the reclamation of Nordstern as the site of the BUGA '97 and the future park. The artist placed potted palms in coal carts, on conveyor belts, in coal funnels, and even in piles of coal itself, in order to make the connection between the vegetable and the mineral as clear as possible. Further clues cemented this connection, such as a stencil that read "300 000 000 JAHRE," the age of the anthracite coal mined in Gelsenkirchen. Throughout the installation, red lamps and fog machines emulated the hot and humid climate in which the prehistoric plants grew. This constituted a creative way to make a pre-human era visible and perceptible, a way that contrasted sharply with the industrial, inorganic interior of the coal mixing and bunker complex.

Karavan also diverged from the geological symbolism of palms and ferns by planting olive trees in some of the coal piles in the installation.²⁴² As such fruiting trees had not evolved by the carboniferous period, the presence of olive trees calls attention to their contemporary

²⁴² Olive trees appear in many of Karavan's works, especially in those which have particularly strong memorial meanings. For the purpose of this chapter, I will focus on the potential meanings of this species within the context of *KunstKlangRaum*.

cultural meanings. On one hand, the use of an olive branch as a symbol of peace has an ancient history and has become nearly ubiquitous in European cultures. With respect to the penitent tone of Psalm 130 and to the concept of *KunstKlangRaum* as memory work, the olive trees can be read as an attempt to “make peace” both with the damage done to human health and the environment by mining, as well as with the loss of industrial employment at Nordstern. On another hand, the specific role of the olive leaf or branch in the Genesis flood narrative connects the trees in the installation to the discovery of life-supporting land after the cataclysm. This interpretation offers a more positive, future-oriented perspective that reemphasizes the importance of the BUGA ’97’s reclamation of public green space from land that was previously closed to the public, depleted of natural resources, and contaminated by the process of coking. These two readings do not exhaust the semantic possibilities of the olive trees in “Mima’amakim,” but give an indication of the kind of wider interpretability that runs throughout the installation. As with post-modern “double-coding,” the individual elements of Karavan’s work are multivalent: both generic and specific in their symbolism, oriented toward both the past and the future, both solemn and celebratory.

In contrast to the artificiality of the potted plants in “Mimaamakim” and the geometric flowerbeds of the BUGA ’97, Karavan directed visitors’ attention to the trees that had spontaneously covered the mining tip across from the coal mixing and bunker complex. To do this, he stenciled the word “BAEUME” on the windows facing them. Unbeknownst to the visitor, and unwritten in the installation, the birch trees visible from the inscribed window are unique to the site. In 1997, botanists identified and named the endemic subspecies *Betula haldensis ssp. nordsterniana* after the mine.²⁴³ The otherwise unassuming birches adapted specifically to thrive

²⁴³ “Botanische Sensation: Haldenbirke entdeckt.” *Westdeutsche Allgemeine Zeitung*, no. 75, Essen: Funke Medien NRW GmbH, 1 April 1997. Internationale Bauausstellung Emscher Park Papers, 1199B. Archiv für soziale

in the nutrient-poor, contaminated, gravelly substrate of mining waste from the Nordstern mine, and testify to the resilience of vegetable life. Without informational signage about these botanical facts, the extent of the tension between the natural and the industrial may not be as appreciable here as it is at post-industrial landscape sites where *Industrienatur* and ecological succession are fully explained. Nevertheless, the contrast between the trees indicated by the “BAEUME” inscription and the architecture of Schupp and Kremmer’s coal mixing and bunker complex is strong enough to make this post-modern contradiction perceptible to visitors.

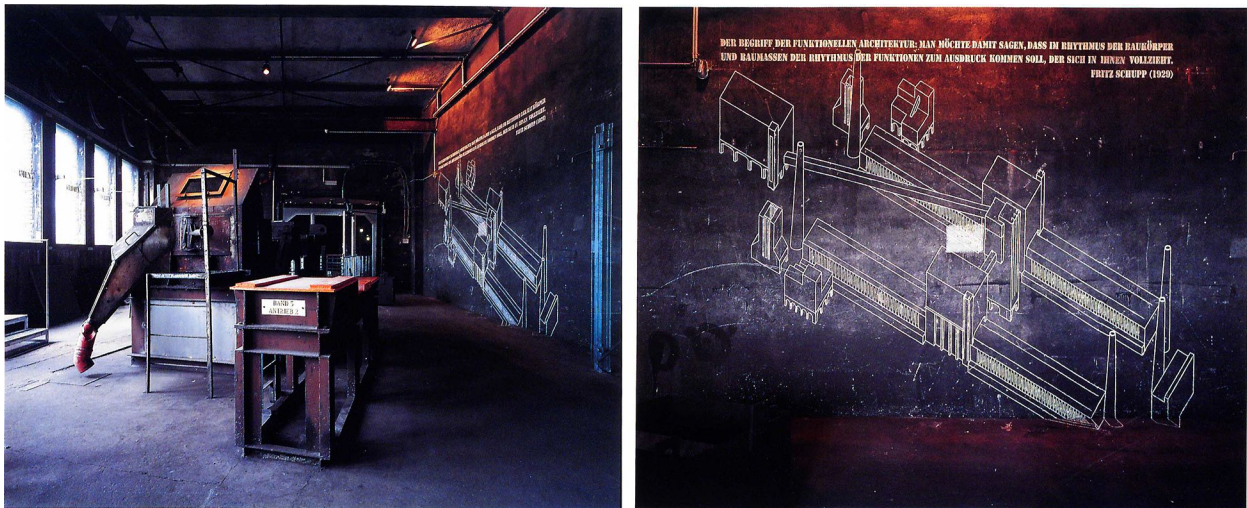


Figure 4.9: Quote and isometric coking plant design by Fritz Schupp in *KunstKlangRaum*. Brockhaus, Christoph, and Hans U. Humpert. *Kunstklangraum: Zeche Nordstern*. Ostfildern: Cantz, 1997, pp. 130-131.

With architectural diagrams and quotes from the buildings’ creators Schupp and Kremmer, Karavan both paid homage to the modernist design that made the site special, and highlighted how the philosophy of that design had become obsolete. The idealized, isometric diagrams of the buildings make the contrast between the clean exteriors of the design, and the orderly but dark and dusty reality of the interior. The tension between the interior aesthetics of the coal mixing building and the Schupp quote about the art of industrial architecture brings an

additional aspect of post-modern architecture into focus: irony. Jencks discusses irony less frequently than the co-presence of past, present, and future, but the concept nevertheless plays an important role in how he distinguishes post-modern architecture's radical eclecticism from naive repetition of historical styles, and in how practitioners of the movement can critique both modern architecture and the commercial proliferation of post-modern architecture without becoming heavy-handed.²⁴⁴ Karavan's use of Schupp's words in the process of repurposing the latter's own architecture into a space for art is the clearest example of this kind of post-modern irony in the BUGA '97.

By placing quotes from the architect about functional architecture in the decommissioned and repurposed building, Karavan both pays homage to Schupp and Kremmer, and shows how Schupp's expressed design principles have become outdated. Schupp defines the concept of functional architecture as a relationship in which the "rhythm" of the building's volume and structure should be an expression of the rhythm of the function that takes place within:

DER BEGRIFF DER FUNKTIONELLEN ARCHITEKTUR: MAN MÖCHTE DAMIT SAGEN, DASS IM RHYTHMUS DER BAUKÖRPER UND BAUMASSEN DER RHYTHMUS DER FUNKTIONEN ZUM AUSDRUCK KOMMEN SOLL, DER SICH IN IHNEN VOLLZIEHT. FRITZ SCHUPP (1920)²⁴⁵

In the context of the *KunstKlangRaum*, the rhythms of production have been replaced by Humpert's composition, and the originally intended relationship between form and function has been subverted. As a memorial art space, "Mimaamakim" reveals Schupp's architecture to be a historical style that, contrary to its purported functionality, has aesthetic preferences that extend beyond purely rational design. This point becomes particularly clear in the second quote Karavan uses, in which Schupp writes that the art of industrial architecture's most important means of

²⁴⁴ While discussing the meaning of "post" in post-modern, Jencks elaborated on this point: "It is also a rebuttal of nostalgia because, while acknowledging the past, it does so in a way that is ironic and non-revivalist. The 'post' sees both traditional culture and modernism in its rear-view mirror." Jencks 2007, pp. 26.

²⁴⁵ Brockhaus and Humpert, pp. 109. From an art-historical standpoint, Schupp's interest in representing industrial rhythms in other aesthetic forms can be seen as part of a larger interest in the rhythms of modern (urban, mechanized) life that was prominent in the New Objectivity of the 1920s.

expression is the iron truss, and that the machine had become the basis of a new perception of beauty:

FRITZ SCHUPP (1929) DAS EISENFACHWERK IST ... WOHL DAS WICHTIGSTE
AUSDRUCKSMITTEL INDUSTRIELLER BAUKUNST. DIE MASCHINE IST DER
AUSGANGSPUNKT FÜR DAS NEUE SCHÖNHEITSEMPFINDEN GEWORDEN.²⁴⁶

Again, Schupp's words become historicized in the context of the installation, and the old, shut-down and dusty machines stand in contrast to the new landscape visible through the windows, with its trees, grass, and bright, multicolored flower beds. Karavan does not ridicule or invalidate Schupp's words or architecture, however, but instead allows the visitor to come to their own conclusions. The fact that Karavan both presents these quotes as historic, explanatory statements and places them in contrast to the surrounding post-industrial art and landscape allows the installation to encompass open-ended, multivalent, and even contradictory interpretations. To the extent that this aspect of "Mimaamakim" engages critically and ironically with Schupp's modernist architecture, the connection between post-modern architecture and post-industrial landscape aesthetics is the most salient here.

²⁴⁶ Ibid., 109.

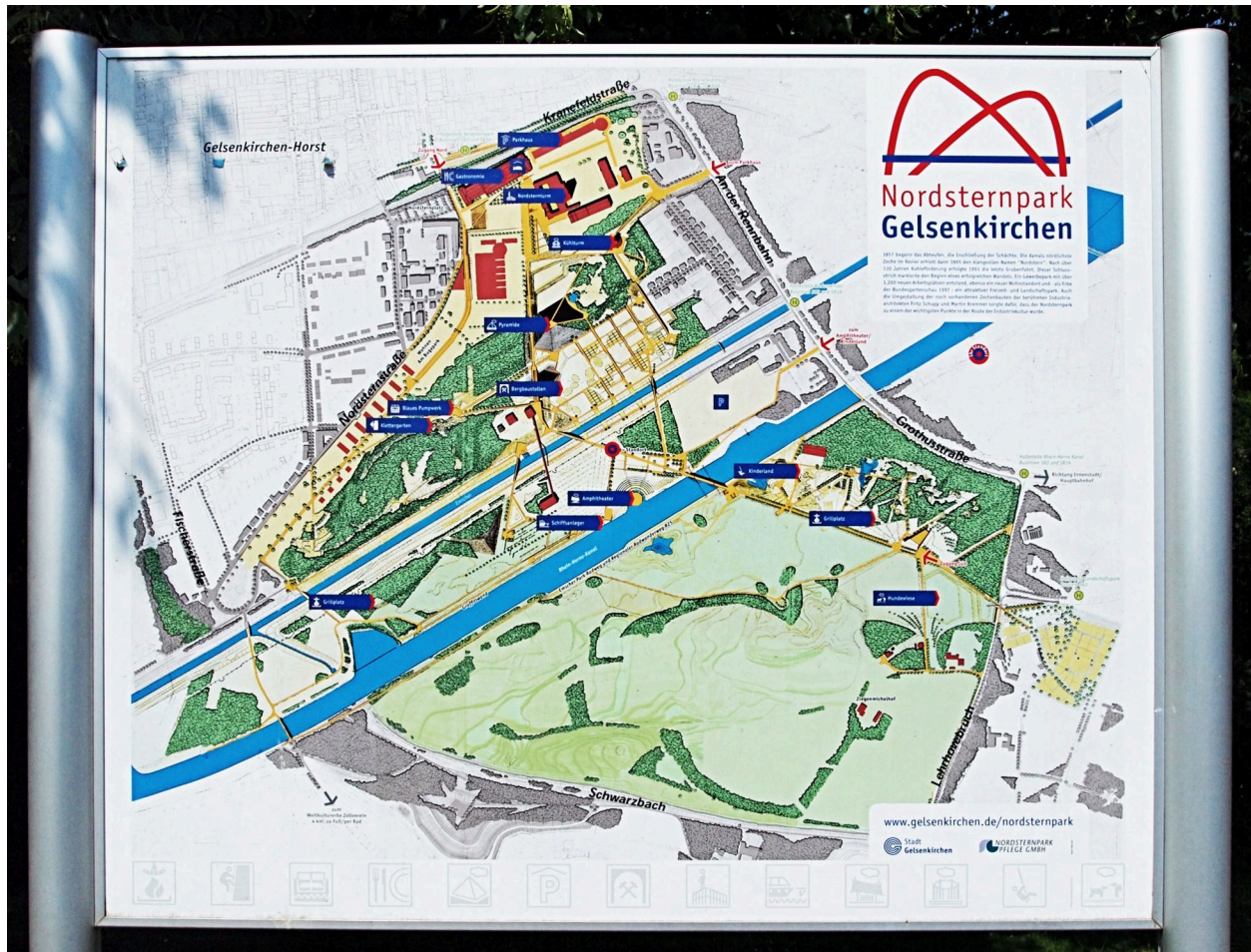


Figure 4.10: Map of Nordsternpark. Photo: Author, 2018.

Nordsternpark, 1997-2017

Between the end of the BUGA '97 and my visit in the summer of 2018, the grounds of the Nordsternpark underwent several major changes. The first was the transition of the BUGA grounds into Nordsternpark, which entailed the dismantling of the monorail, hall shows, *KunstKlangRaum*, and most of the flower beds. Despite efforts to make Karavan's and Humpert's installation permanently open to visitors, the coal mixing and bunker complex was closed and blocked off from access. Renovations of the central Nordstern buildings began, where the local real estate company THS took residence.²⁴⁷ In 2012, THS merged with the real estate

²⁴⁷ THS stands for TreuHandStelle für Bergmannswohnstätten, a real estate trust for miners that was founded in 1920.

subsidiary of the chemical firm Evonik Industries to form Vivawest, Germany's third largest real estate firm, and placed its logo on the front of the mine's headframe.

The next major changes took place in 2010, when the Ruhr metropolitan region received the distinction of EU Cultural Capital. For this event, THS commissioned an expansion of the Nordstern tower and a crowning sculpture. Behind the renovation and installation was architect and Professor Karl-Heinz Petzinka, who at the time was both the artistic director of the RUHR.2010 and the chair of THS.²⁴⁸ Four glass-walled floors were added, with offices and space designated for video art screenings, and topped with a new panorama platform, making Nordsternturn one of the seven highest points throughout the Ruhr. In order to make the tower accessible without intervening in the historically protected architectural substance, a parallel tower with elevator shaft and staircase was constructed.²⁴⁹ These additions were crowned with Markus Lüpertz's 18-meter, 23-ton *Herkules von Gelsenkirchen*, which stands facing east. In 2017 the city celebrated the twenty-year anniversary of the BUGA '97. The grounds were once again planted with temporary decorations, and Vivawest created a new exhibit for the museum inside the Nordstern tower.

²⁴⁸ Christoph, Lars-Oliver. "Interview: THS-Chef Petzinka über das Herkules-Projekt "Anstoß für Veränderung"" *Westdeutsche Allgemeine Zeitung*, Essen: Funke Medien NRW GmbH, 22 December 2008.

²⁴⁹ Dietz and Bott, pp. 63-69.



Figure 4.11: Markus Lüpertz' *Herkules von Gelsenkirchen* (2010), from below and from the viewing platform atop the Nordsternurm. Photos: Author, 2018.

The Hercules of Gelsenkirchen

Lüpertz's *Herkules von Gelsenkirchen* has monumental dimensions. The sculpture, which was welded together from 244 individual cast-aluminum parts around steel supports, stands eighteen meters high (atop the 85-meter Nordstern tower) and weighs a total of twenty-three tons (fifteen for the steel skeleton, plus eight for the aluminum sculpture).²⁵⁰ Although clearly metallic, the materiality of the statue eludes simple classification. For the most part, Hercules is a flat, light gray of unpolished metal. Lüpertz painted Hercules brightly, but sparingly: the beard and hair (which extends only partly around the back of Hercules' head) were blue, the lips and parts of the club were red, and the shell of the turtle was green. Over time, these colors have been

²⁵⁰ Stecker, Raimund, editor. *Markus Lüpertz: Herkules: Bozzetti für ein Monument im Ruhrgebiet*. Bielefeld: Kerber Verlag, 2011, pp. 34-39.

bleached by the sun, leaving mostly only blue and green behind. The surface texture reflects the irregular combination of plaster, styrofoam, wood wool, and corrugated bitumen roofing sheets that Lüpertz used to form the original.²⁵¹

From the viewing platform, visitors can overlook the park to the south, and spot the other landmarks of the region, not only the industrial heritage of the headframes, blast furnaces, and gasometers, but also the landmark art and architecture that crowns the recultivated mining tips. Upon paying their entry fees, visitors receive printouts that help orient their view within the almost-360° panorama. The view from the eastern side of the platform is obscured by the top level of the elevator- and fire-escape-tower, which doubles as a pedestal for Lüpertz' *Herkules von Gelsenkirchen*.

In its placement atop a tower at the highest point of a landscape garden, Lüpertz' *Herkules von Gelsenkirchen* references the Hercules monument (1701-1717) at the UNESCO World Heritage Site Bergpark Wilhelmshöhe in Kassel, whose grounds include an extensive English landscape garden with elements of French gardens. There, a copper statue cast in the form of the ancient Greek Farnese Hercules overlooks a cascading grotto that leads directly to castle Wilhelmshöhe. This Hercules leans with his left shoulder on his club, covered with the pelt of the Nemean lion, while he clutches apples of the Hesperides in his right hand.

At first glance, Lüpertz' Hercules seems less heroic than the Kassel version. He carries neither the apples nor the lion's pelt from his Twelve Labors, and has a much less muscular figure. His head is disproportionately large: it makes up roughly three-tenths of the sculpture's height, as do the legs.²⁵² His right arm is relatively small; if it were by his side rather than

²⁵¹ Schmeer.

²⁵² The *Westdeutsche Allgemeine Zeitung* has stated the rationale for Hercules' top-heavy proportions to be a compensation for the steep angles at which onlookers on the ground would view the sculpture. This does not explain why many of Lüpertz's sculptures that have been installed or exhibited at ground level also have disproportionately

extended forward, it would barely reach his hip. His left arm is missing altogether, and his club stands atop a turtle and leans against his left hip.

What kind of hero Lüpertz has made for Gelsenkirchen is open to interpretation. Online commentary on the *Westdeutsche Allgemeine Zeitung*'s articles about the statue shows a polarized reception, and the Nordstern museum includes satirical cartoons about *Herkules von Gelsenkirchen* in its section on the statue's creation and installation. Yet in its irreverent referentiality to high art and world-famous landmarks, Lüpertz' Hercules offers more than just an artistic provocation—a criticism that other sculptures by Lüpertz have received. There seems to be post-modern humor, irony, and satire in play, but it remains unclear as to whether high art, or the people of Gelsenkirchen are the butt of the joke. This Hercules doesn't convey triumph from some grand achievement, such as having successfully shifted from an industrial to a post-industrial economy, yet he persists in spite of his deformities and his detractors.

Nordsternpark Today

To reach Nordsternpark via public transit from Gelsenkirchen main train station, one takes a half-hour bus ride past the Musiktheater im Revier (the city opera house), between two vocational schools, and past an extended strip of auto rentals and retailers, big box stores, and gas stations, before reaching the eastern corner of the park. As one crosses the Rhine-Herne Canal, and then the Emscher, the red parabolas of the park's bridges are doubled in the reflective surfaces of the waterways to the left of the bus; passengers seated on the opposite side will instead have a clear and close-up view of the local oil refinery. Further on, Lüpertz' Hercules

large heads. This also does not account for the Hercule's visibility from other high points across the Ruhr, for which there would be no such foreshortening effect. See: Schmeer, Oliver. "Kraftvoller Kunst-Kerl. Lüpertz-Skulptur für Nordstern." *Westdeutsche Allgemeine Zeitung*. Essen: Funke Medien NRW GmbH, 6 July 2010. See also: Fischer, Annika. "Herkules-Skulptur schwebt über dem Revier." *Westdeutsche Allgemeine Zeitung*. Essen: Funke Medien NRW GmbH, 15 December 2010.

begins to peek out from behind the trees and buildings along the side of the road. From the Nordsternpark bus stop at the north entrance to the park, visitors pass through a tunnel under a raised rail track to reach “Nordsternplatz.” Here, the view to the east goes up a low, stepped incline, and crosses the Nordstern plaza before reaching the mine itself.

At the foot of the Nordstern mine, one finds the old signs from the Emscher Park and the *Route der Industriekultur*, offering information to curious visitors about the site’s history, transformation, and context in the regional network of industrial heritage and nature sites. One of the park’s linear paths that doubles as a sight axis stretches from here to the coal mixing building, straight through the trench that was cut through the site’s mining tip.

Rather than follow this path, I opted to climb the “pyramid,” which consists of the eastern part of the tip and a viewing plateau at the top, accessible via two staircases. From the top of the pyramid, one has a clear view until the Emscher, where the red arches of the two bridges reach above a line of trees on the south bank that blocks further view. Metal placards in the stones along the edges of the small triangular plateau point the direction and distance to local churches, mining tips, industrial heritage sites, and other points of interest; a small yellow telescope stands ready for use. Due to the relatively low altitude of the pyramid, compared to the Nordstern tower and other mining tips throughout the region, the panoramic view is limited to the nearest objects.



Figure 4.12: Rose trellises, BUGA '97 logo planter, herb garden, and Doppelbogenbrücke, seen from the "Pyramide" at Nordsternpark. Photo: Author, 2018.

To the left (east) lie the original steel frames for roses from the BUGA '97, a secluded rhododendron garden, a perennial garden, and a flowerbed in the shape and colors of the BUGA '97 logo. Lines of drier, yellow grass trace the outlines of past plantings across the lawn; a scratched plastic sign informs the visitor that this field once featured the Cultural Capital RUHR.2010 logo in a combination of summer flowers, perennials, grasses, and bushes. Thus the terrain bears traces of its past uses, going back to the BUGA '97.



Figure 4.13: Further Nordstern landscape, including coal mixing and bunker complex, as seen from the “Pyramide.” Photo: Author, 2018.

To the right (southwest) lie more prominent reminders of the park’s industrial past. In the immediate foreground lies a descending, triangular patch of dark gravel that leads to the imitation mine shaft that mining engineers constructed for the BUGA ’97. Since its opening, it has housed a mining museum operated by a volunteer organization of former miners who were employed at Nordstern. Above and beyond the patch stand a hub of raised paths that allow visitors on wheels to access different sections of the park with ease. Behind these paths stands the coal mixing and bunker complex, where the *KunstKlangRaum* was once housed. Beside the complex, one can see the *Blaues Pumpwerk*, a sewage pumping station that features a blue glass facade designed by Jürgen LIT Fischer (who was responsible for the light installation atop the *Tetraeder*) for the BUGA ’97, and that now pumps rainwater into the Emscher while directing sewage through the underground canal. Further to the right and farther into the distance, a thin

dark line extends upwards from a level plateau on the horizon. This is Richard Serra's *Bramme für das Ruhrgebiet*, a fourteen-centimeter-thick slab of weathering steel that stands nearly fifteen meters high and four meters wide, which was erected atop the Schurenbach mining tip in 1998 as part of the IBA Emscher Park's *Landmarkenkunst* program.²⁵³ Even farther west, the *Tetraeder* and Kokerei Hansa can be seen behind the other half of the mining tip, trees, offices, and houses.



Figure 4.14: Perennial Garden, with steel rose trellises and single-arch bridge over the Emscher in the background. Photo: Author, 2018.

Perceptible Tensions in the Post-Industrial Landscape of Nordsternpark

In the landscape of Nordsternpark, Jencks' post-modern tensions of new/old and

²⁵³ Berke 2017, pp. 109-111.

accommodating/subversive meet the post-industrial tension of natural/industrial. The more conventional aspects of the park's design, namely the flower and herb gardens and the forested mining tip with its trails and grill pits, constitute the new and accommodating elements. They foreground pleasures of the senses and leisure activities that are accessible to the majority of visitors, but omit any kind of explicit historical markers that would connect them to the park's past or its importance as a post-industrial landscape. On the other hand, the parts of the park that are off-limits to the public, the Emscher River and the coal mixing and bunker complex, remain as material reminders of the site's past that have either unpleasant or disputable aesthetic effects. Depending on the visitor's engagement with the site, the tensions are perceptible across multiple senses, most notably smell.

The olfactory tensions between old/new, subversive/accommodating, and natural/industrial play out in the contrast between flowers and herbs, and the Emscher River. On the one hand, the visitor's indulgence in smelling flowers and herbs may be a pleasant experience, perhaps one tied to memories that have nothing to do with the site's former functions. On the other hand, anyone who experienced the Emscher prior to its ongoing cleaning will be able to smell the difference, or at least be reminded of the earlier strength of its odor.²⁵⁴

Between the coal-mixing plant and the eastern edge of the park, flowerbeds, rose trellises, and perennial gardens perfume the summer air. Visitors who stop to brush their fingers across the catmint, lavender, oregano, sage, and other herbs planted there will release characteristic aromas into the air and onto their hands, perhaps evoking memories of other gardens or kitchens. The smells of roses and herbs face little competition from the nearby Emscher, whose lingering smell seems not to reach beyond the concrete slopes of the former sewage canal. Instead, only from the

²⁵⁴ The significance of the Emscher's smell can be seen, for example, in its inclusion among a series of characteristic smells of the Ruhr that are on permanent exhibit in the Ruhr Museum. Sadly, whatever fragrance sample had been used for the Emscher was either depleted or removed by the time of my visit.

bridges that cross the Emscher can one detect the river's odor. The horticulture of the post-industrial landscape park is conventionally pleasing to the senses; it shows that a former coal mine can be reclaimed as an attractive space for recreation. It is wholly unconcerned with artistic memorialization or with posting information about the site's history, however.

The species of plants found throughout this section of the park have little to do with the history of coal mining. Their presence is a reminder of the BUGA '97, and by extension a reminder of the site's transformation, but the species themselves have no further connection to local traditions or the impacts of coal mining on the landscape and its ecosystem. By contrast, the vegetation and terrain of the so-called "Haldenpark" are specific to the site and its history. This small, wooded hill is a section of mining tip that, with the exception of several trails, picnic and grilling areas, and lookout points, has been allowed to grow vegetation without further human intervention.



Figure 4.15: Overgrown mining tip at Nordsternpark. Note the level path and angled slopes typical of stepped-terrace and unique “Haldenbirke” (Mining tip birch) endemic to the Nordstern site. Photo: Author, 2018.

The Haldenpark is subtly rich with indicators of its previous industrial purpose as a mining waste pile. Visitors familiar with other reclaimed mining tips in the region will recognize the characteristic angled slopes on either side of the path. But the fact that botanists once declared these trees to be unique to the local environment remains untold. Instead of offering this kind of specialized information about ecological succession on former industrial sites, the Haldenpark provides well-maintained trails with shallow inclines, multiple fire pits, and elevated lookout platforms. From the amount of ash and charred wood fragments in these pits, it is clear that this area sees use on a regular basis, at least during the summer.



Figure 4.16: Nordstern coal bunker. Photo: Author, 2018.

Whereas the flower and herb gardens and the Haldenpark are aligned with new/natural/accommodating, the coal mixing and bunker complex provides the old/industrial/subversive counterpoint in the post-modern tensions here. Here, the aesthetics of industrial ruins, which constitute an important part of post-industrial landscape aesthetics, are on display. As I will discuss, these aesthetics are constitutive of the old/industrial/subversive aspects of the buildings.

The buildings themselves are now inaccessible. The smaller coal mixing plant has been fenced in, and its exterior staircases have been removed. The coal bunker is less isolated: masonry fills large openings in the sides of the building and its staircases, but the fence that encloses the open-air ground level is too short on the secluded side of the building to pose a

serious hindrance to anyone intent on climbing in. On both buildings, graffiti attests to visitors' participation in the prohibited activities of trespassing and vandalism.



Figure 4.17: Graffiti on the ground level of the coal bunker at Nordsternpark. Photo: Author, 2018.

From the early stages of his theorization of post-modern architecture, Jencks had already articulated an argument for the preservation of the ruins of modernist architecture. In reference to the 1972 demolition of the Pruitt-Igoe housing blocks in St. Louis, Missouri, he wrote that the rubble should be preserved, so that future generations could learn from past failures:

Without doubt, the ruins should be kept, the remains should have a preservation order slapped on them, so that we keep a live memory of this failure in planning and architecture. Like the folly or artificial ruin - constructed on the estate of an eighteenth-century English eccentric to provide him with instructive reminders of former vanities and glories- we should learn to value and protect our former disasters.²⁵⁵

Although his suggestion might carry a certain amount of post-modern irony, the fundamental

²⁵⁵ Jencks 1991, pp. 23

rationale behind the impulse to preserve the ruins of the recent past is also at work in Nordsternpark. The preservation of industrial heritage here does not have the same degree of criticism that Jencks seems to imply, but the buildings nevertheless stand as reminders of the era of coal in contrast to the recreational landscape around them.

Despite the somewhat ruinous, graffiti-tagged appearance of the coal mixing and bunker complex, the former site of the *KunstKlangRaum* does not seem to dampen the recreational and light-hearted atmosphere of the park. This, too, connects to one of Jencks' concepts of post-modern architecture, namely to the idea of "inclusive architecture." This term overlaps with the others I have previously discussed in this chapter, to the extent that it also entails the combined presence of multiple pairs of opposites, but it adds the ability to assimilate unpleasantness without itself becoming unpleasant:

It can include ugliness, decay, banality, austerity, without becoming depressing. It can confront harsh realities of climate, or politics without suppression.²⁵⁶

Thus, the complex can show structural decay or graffiti without making the park as a whole look run-down. It can also stand as evidence of the ingenuity of industrial architecture, as well as the exploitation of human labor and the environment that took place under mining, without becoming didactic or depressing.

To understand how the adjective "subversive" comes into play here, I turn to Tim Edensor and Steven High's understandings of urban exploration. In his account of the recreational practice of trespassing for generally benign purposes, Edensor lists a "subversive, anti-authoritarian nature of such pursuits" among the reasons that participants listed for engaging in this activity.²⁵⁷ High notes that purists of "urbexing," as it is called, reject graffiti as vandalism

²⁵⁶ Jencks 1998, pp. 308-316.

²⁵⁷ "On a more organised scale are groups of urban explorers who, attracted to active as well as derelict buildings, are drawn towards ventilation shafts, disused tunnels, towers, drains, sewers, bridges, underground complexes, mines, disused quarries, churches, prisons, military sites, old hospitals and asylums. According to the accounts

under the principle of “take only pictures, and leave only footprints.”²⁵⁸ Nevertheless, Edensor recognizes that graffiti artists also use the unpoliced spaces of industrial ruins “to develop their alternative aesthetics and skills.”²⁵⁹ Thus, although strict urbexers would leave no trace of their infiltration, it is clear that the coal bunker, if not the coal mixing building as well, sees unintended use. This offers a contrast to the rest of the park, where popular, widely-accepted forms of recreation take place in broad daylight. But again, in keeping with Jencks’ concept of inclusive architecture, these subversive aspects of the coal mixing and bunker complex do not seem to have an adverse impact on the park’s overall feeling of safety.

Conclusion

From the earliest stages of planning the BUGA ’97 to today, Nordsternpark has been at the center of contradictory intentions, meanings, and aesthetics. In this chapter I have analyzed examples that illustrate what I believe to be the key tensions at play in this park’s artworks and landscape. And in order to make sense of this, I have turned to Jencks’ theories of post-modern architecture. From Jenck’s definition of “double-coding,” I have taken the binaries of high/low, accommodating/subversive, and new/old, and used them to analyze the cases in this chapter. As a result, my readings suggest that the BUGA ’97 and Nordsternpark follow Jencks’ tenets of post-modern architecture to the reclamation, redesign, and reuse of the post-industrial landscape,

compiled by participants, the motivations for such explorations vary from those attracted to architecture and history, the sensual dimensions of such places, the subversive, anti-authoritarian nature of such pursuits, the adventure- some physicality of such endeavours, and the thrill of the risk entailed. In the case of the latter motivation, urban exploration is akin to the expansion of adventure sports which seek out thrills and 'peak' experiences at variance to an over- regulated and usually quiescent life. Informed by an ethics which takes a dim view of vandalism and the right to transgress regulatory regimes, and equipped with torches, hardhats, climbing equipment, face masks and goggles they enter these often forbidden zones, usually at night, frequently with the aim of exploring the least accessible parts of the complex. Taking photographs and writing accounts that record their adventures, these groups communicate and encourage their practices through invisible networks of association, typically via the numerous websites dedicated to the subject [...]” Edensor, pp. 29-30.

²⁵⁸ High and Lewis, pp. 48-49.

²⁵⁹ Edensor, pp. 33-34.

where the unique tension of natural/industrial joins those that Jencks identified.

Although Nordsternpark is one of the region's top five most visited "Orte der Industriekultur," it does not have the level of international recognition that the most closely related sites do.²⁶⁰ Zeche Zollverein, a former mine and coking plant in nearby Essen that was also designed by Schupp and Kremmer, received UNESCO World Heritage status in 2001, and has become an icon of Ruhr post-industrial revitalization, not least through its massive media presence in publicity materials for the RUHR.2010 European Capital of Culture. In addition, Landscape Park Duisburg North, which has won multiple design awards and received extensive scholarly attention, has eclipsed Nordsternpark as the textbook example of best practices in post-industrial landscape design. But I would argue that Nordsternpark's failure to garner the kind of renown that these other sites have sheds further light on the interrelationship among post-industrial landscape aesthetics, the principles of post-modern architecture, and even Maskit's concept of "the interesting" in postindustrial environmental aesthetics.

What my argument, Jencks' work, and Maskit's article have in common is tension. Tension is much like contrast, in that it entails the simultaneous presence of binary opposites, and both draws attention to their differences and heightens the characteristic effects of each. In Maskit's preliminary description of his idea of "the interesting," it is not so much the Kantian sublime that he finds so compelling about the works of Smithson, Serra, Latz, and Prigann, but more so the series of contradictory responses that they elicit:

For Kant tells us that the sublime both attracts and repels us. And so too with sites such as these. We find ourselves simultaneously awed and disgusted; impressed and depressed. The power of technological culture to transform nature is made manifest here in its starkest form. And yet, we do not turn away. We both rue what is no more and are smitten by what is.²⁶¹

²⁶⁰ *Der Nordsternpark. Freizeit, Erholung, Kultur und Arbeiten im Landschaftspark am Wasser*. Stadt Geslenkirchen, Der Oberbürgermeister. April 2017. 39.

²⁶¹ Maskit, pp. 331-332. Maskit is right to point out the similarity of his "interesting" to the Kantian sublime, but he is not alone in doing so. The sublime appears in several other analyses of post-industrial aesthetics, such as Tim Edensor's *Industrial Ruins: Space, Aesthetics and Materiality* (2005), Steven High and David Lewis' *Corporate*

The tensions between these dual responses stand out most vividly here. To feel two apparently mutually exclusive emotions at the same time defies expectations and purely logical reasoning, and in this moment of contradiction, feelings of surprise, confusion, wonder, and even humor can arise and generate interest. In Jencks' theories of post-modern architecture, precisely this kind of simultaneous presence of opposites is essential to "double-coding," not only as an ironic and playful rejection of the austere rationalism of modernist architecture, but also as a recognition of the need to communicate effectively with a wide audience that includes people with different and often incompatible interests. And this is where Nordstern may have gone wrong, conceptually speaking: in aiming to please a wide audience it may have abandoned tension and submitted to a perceived pressure to compromise.

The importance of tension to post-modern architectural theory can be seen in Jencks' criticism of compromise. Throughout *The Language of Post-Modern Architecture*, Jencks associates it with attacks on post-modern architecture as weak (not "radical") eclecticism or pastiche.²⁶² But he makes the clearest argument in his discussion of the dangers threatening post-modern architecture in the face of its own commercial success:

Conceived as a wide language which cuts across high and low taste cultures with a double coding that still holds the integrity of each voice, it can result in crude compromise. In the 1950s Dwight MacDonald and other literary critics damned such mixed gruel as Mid-Cult - neither high nor low culture but a parody of both. This is the constant danger for Post-Modernists in every area, especially the most commercial ones: film, TV, music, the popular novel and architecture. Always trying to reach a wider and more varied audience [...], Post-Modernists may be constantly tempted to simplify their message, edit out its irony and double coding, and appeal to the largest group with the falsely consoling idea of an integrated culture.²⁶³

Here, Jencks connects "crude compromise" to what I see as a negation of tensions, most notably in the form of editing out "double-coding," and thereby all "radical schizophrenia" and "radical

Wasteland: The Landscape and Memory of Deindustrialization (2007).

²⁶² "A difficulty of Post-Modernism is in adopting plural coding without degenerating into compromise and unintended pastiche..." Jencks 1991, pp. 73.

²⁶³ Ibid., pp. 165.

eclecticism.” Yet precisely this kind of compromise took place in the BUGA ’97 and at Nordsternpark, between Ganser’s innovative but narrow interests in post-industrial landscape aesthetics, and the popular, conventional programming proposal that he criticized. This compromise only persisted throughout the site’s history. Even though individual projects exhibited greater degrees of tension than others, and even though the most stereotypically conventional aspects of the BUGA ’97 also exhibited post-modern contradictions, the event and the site as a whole can be understood as a compromise, in which contradictory elements have been placed together, without having been “unified creatively for a specific purpose.”²⁶⁴

What remains at Nordsternpark is now a popular outing destination that also happens to be a former coal mine. The tension between elite/popular that was so strong in the contrast between Heino and the *KunstKlangRaum* can no longer be heard. The physical and intellectual challenges that Humpert and Karavan created for visitors, with their multivalent and open-ended interpretability, have been replaced by an inaccessible building complex that stands as a silent reminder of the site’s industrial past. And even the interesting contradiction of herbs and flowers on a coal mine has lost its post-modern tension, as the IBA Emscher Park’s 1990s neologism “Industrienatur” has become commonplace. I write this not to lament the loss of a certain dynamic, but rather to mark the change that has come with the normalization of the kind of post-industrial landscape aesthetics that visitors can experience at Nordsternpark.

²⁶⁴ Jencks 1998, pp. 310.

EPILOGUE

Post-Industrial Landscape Aesthetics and Interdisciplinary German Cultural Studies



Figure 5.1: Tim Etchells' *How Love Could Be* atop the Deutsches Bergbaumuseum in Bochum. Photo: Author, 2014.

I am not a meteorologist. When I took the photograph above on Pentecost, 9 June 2014, during my first research trip to Bochum, I had no idea that I was looking at the precursors of supercell storms that would cause damage worth 650 million Euros and claim six lives across

North Rhine-Wesphalia.²⁶⁵ Because the archive that holds the IBA Emscher Park's collections had been closed for the holiday, I spent the day at Landscape Park Duisburg North, where I experienced firsthand the thrill of standing atop a decommissioned blast furnace in a rainstorm amid thunder from unseen lightning.²⁶⁶ But the weather passed, and I thought nothing of it for the remainder of the day. Even when presented with the dramatic cloud formations behind Tim Etchells' installation *How Love Could Be*, a part of the Schauspielhaus Bochum's year-long, post-Opel arts festival *Das Detroit Projekt—This is Not Detroit*, my only concerns were composing the shot and getting enough exposure for both the sky and the historic headframe of the Deutsches Bergbau Museum.²⁶⁷ The severity of the coming storm would hit me only when, while enjoying an evening drink at the Bermuda3eck with my hostel roommate, a traveling Hegel scholar, the wind began overturning the large, metal beer-garden umbrellas whose heavy concrete bases could no longer hold them upright.²⁶⁸ We quickly abandoned the deposits on our glasses in order to assist the staff in closing the umbrellas, and then sprinted through walls of falling water to reach our hostel. Lightning flashes illuminated our room through the night. The next morning, I would arise to find the city full of fallen trees, and most forms of transportation completely immobilized. With such a stormy welcome to academic fieldwork, I embarked on an

²⁶⁵ Rentmeister, Christina. "Nach Friederike: Lothar, Kyrill, Ela - das waren die schlimmsten Orkane in Deutschland." *RP Online*, 19 January 2018. https://rp-online.de/panorama/deutschland/nach-friederike-lothar-kyrill-ela-das-waren-die-schlimmsten-orkane-in-deutschland_aid-17631129

²⁶⁶ At the time, I had not yet learned of the aesthetic theories of the sublime, and was only familiar with its much milder, contemporary usage. Had I been aware of this, I am certain that the visceral thrill would have been accompanied by an intellectual appreciation of being able to have firsthand experience of the sublime in the post-industrial landscape.

²⁶⁷ The Schauspielhaus Bochum collaborated with Urbane Künste Ruhr to host *Das Detroit Projekt* between 2013 and 2014, in response to GM's decision to close the Opel manufacturing plant in Bochum. Artists from other European cities with Opel plants such as Zaragoza, Spain; Gliwice, Poland; and Ellesmere Port, United Kingdom participated in the festival, as did some from the United States. Etchells' installation takes its name and message from a Motown song: "Bad Girl," by Smokey Robinson and the Miracles. Following the end of the festival, *How Love Could Be* migrated from the Deutsches Bergbaumuseum to the Ruhr Universität Bochum, and recently moved again to the Hochschule für Gesundheit.

²⁶⁸ "Bermuda3eck" refers to a triangular area in Bochum with a high density of gastronomic businesses, and the name appears in large neon letters on an empty gas holding tank that has been converted into a skateboard shop.

adventurous learning process that has culminated in this dissertation.

I came to the German Ph.D. program at the University of Michigan in 2012 with a vaguely-defined interest in the aesthetics and reuse of old industrial sites.²⁶⁹ It took time for me to gain clarity of purpose, and the kind of exploratory writing that can be seen in Chapter II is symptomatic of my unfocused curiosity at the beginning of the process of dissertating. A major change took place while writing Chapter III, as a result of two things: first, I began working more closely with my own documentation of the sites I analyzed (which was impossible for my work on Weisshaar's projects); and second, the interconnectedness of artists, artworks, and theory helped me learn to articulate arguments and frame my work in a more intentional manner. This learning process continued through Chapter IV, for which I needed not only to combine accounts of past arts and garden events with my recent firsthand experiences of the site, but also to find an appropriate theoretical framework without the serendipitously tight connections that had helped me in the previous chapter. I may have chosen the term "post-industrial landscape aesthetics" early on in the process of writing this dissertation, but only upon working through Chapter I, have I finally begun to comprehend what the term means, and how each chapter should contribute to its articulation.

Over the course of writing this dissertation, I have realized several things about myself as a scholar and about how both my work and I are situated in the larger academic world. As stated above, I am not a meteorologist. I am also not a historian of art, architecture, landscape design, industry, or Germany, nor am I an anthropologist, an archaeologist (industrial or otherwise), an environmental scientist, a geographer, a philosopher, a sociologist, or an urbanist. And yet, meteorology aside, each of these fields and disciplines has its own stakes in—and approaches

²⁶⁹ One of the things that I didn't realize clearly at the time was the full extent to which my curiosity had been shaped by scholarship on industrial ruins that had been done the mid- to late 2000s, from Tim Edensor's *Industrial Ruins* through the contributions in Andreas Schönle's and Julia Hell's *Ruins of Modernity*.

to—the materials, methods, and/or theories that I have chosen to work with. Whenever I have recited this list of things-I-am-not, the question inevitably follows: what *are* you, then? My answer: a German cultural studies scholar, with additional specialization in museum studies.

Irene Kacandes writes that, in order to avoid dilettantism, teachers and scholars of German cultural studies must reeducate themselves in the disciplines that they bring to bear on their work, but notes that this reeducation can be difficult to achieve between heavy teaching loads and pressures to publish.²⁷⁰ For graduate students in the field of German cultural studies, a related challenge exists. While I have enjoyed lighter teaching loads and less pressure to publish than faculty, the necessity of educating myself in different disciplines has presented itself at a time during which I'm still learning how to be a teacher and scholar in the first place. Clarity of intent, argument, and composition, as well as the ability to discriminate between what is important and what is tangential to an argument, come with experience. In my case, this learning experience has taken an iterative form of trial and error, which in combination with the need to educate (rather than to reeducate) myself in other disciplines, has required time and effort that I could have otherwise invested in improving my writing, engaging more actively in conferences, or deepening my knowledge of a narrower area of expertise. If the resulting dissertation thus shows signs of dilettantism, which in Kacandes' view teachers and scholars should seek to avoid, then I point to the work that Safia Azzouni and Uwe Wirth have done to rehabilitate the term from its pejorative connotations.²⁷¹

Yet despite its challenges, interdisciplinary German cultural studies may be the single most appropriate field from which to approach the post-industrial landscape aesthetics that I

²⁷⁰ Kacandes writes: "To avoid dilettantism teachers and scholars must work hard to reeducate themselves about other disciplinary practices. Finding the time to do this kind of reeducation is difficult, given increasingly heavy teaching loads and continuing demands for specialization and publishing in almost all American institutions of higher learning." Kacandes, Irene. "German Cultural Studies." *A User's Guide to German Cultural Studies*, Denham, Scott D., et al., editors. Ann Arbor: University of Michigan Press, 1997, pp. 16.

²⁷¹ See: Azzouni, Safia, and Wirth, Uwe. *Dilettantismus als Beruf*. Berlin: Kulturverlag Kadmos, 2010.

study. The open-ended and highly referential artworks and landscape designs that I have chosen to study require theoretical frameworks that are expansive enough to encompass histories across geological time scales, flexible enough to handle the conflation of opposites such as nature and industry, and rigorous enough to incorporate technical and scientific aspects of industry and post-industrial environments. In a sense, post-modern materials (again, using Jencks' version of the term) demand post-modern methods.

Over the course of writing this dissertation, it has become increasingly clear that post-modern architectural theory, and possibly theories of post-modernity more generally, apply to many of the aspects of post-industrial landscape aesthetics that I have—at times—struggled to reconcile. Jencks' notions of “double-coding,” “radical eclecticism,” “ad hocism,” and post-modern irony offer the kind of complexity and flexibility necessary to address an interdisciplinary and often highly ambivalent set of primary materials. Moving forward, I would apply these lessons to more rigorous theoretical work. The questions that arise, of course, concern not only how post-industrial landscape aesthetics overlap with and teach us more about post-modernism, but also how they differ from it, and why that difference matters.

The other thread that I would like to pursue is the German cultural history of the relationship between nature and industry over time. This would entail much deeper exploration of the values of landscape categories such as lakes, mountains, forests, and deserts. The concept of *Heimat*, and the history of German environmentalism would also play important roles in this project. Yet I would want to do this work with an eye to the present and future, in order to bring my analyses to bear on the end of anthracite coal mining in the Ruhr, and on the ongoing development of post-industrial landscape aesthetics across Germany.

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